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Introduction to HOUSING Facts and Principles

By EDITH ELMER WOOD



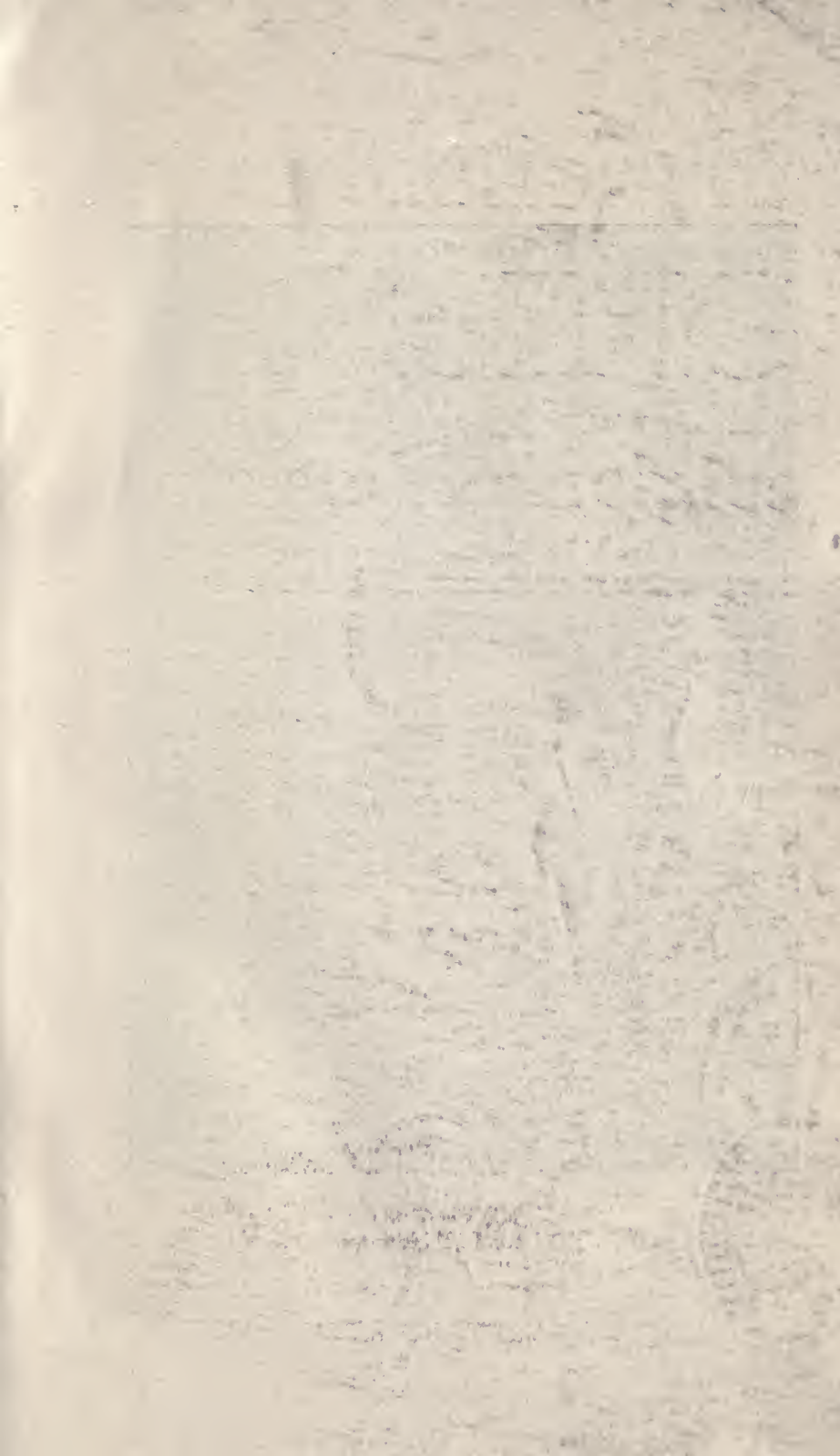
FEDERAL WORKS AGENCY

UNITED STATES HOUSING AUTHORITY

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A trio of Uncle Sam's tenants.

"Growing chicks . . . need comfortable houses . . . with plenty of fresh air and sunlight." *Farmer's Bulletin No. 1554.*

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By EDITH ELMER WOOD

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UNITED STATES HOUSING AUTHORITY

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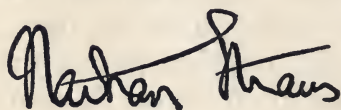
Foreword

THIS BOOKLET is designed to present a simple and yet authoritative discussion of basic housing facts and principles which are of concern to every community determined to clear its slums and provide decent homes for families of low income. Its contents should be of interest not only to those who are actively associated with the housing movement but also to the public at large. As Dr. Wood points out in the opening pages, the housing problem is important to all of us: It affects the individual, the family, the community, and the Nation.

Time was, of course, when the housing problem seemed exclusively the property of professional "housers," of social workers, architects, governmental officials, and a handful of civic-minded citizens. Today, happily, that is no longer the case. As a result of an aroused public opinion, the housing problem and the low-rent housing program have become public property in a very profound sense. Today, organizations of every sort—trade unions, religious organizations, veterans' groups, educators, women's clubs, welfare societies, parent-teachers' associations, business and professional groups—are making slum clearance and low-rent housing the subjects of conventions, resolutions, studies, and conferences.

Possibly no person is better equipped to discuss the subject of this booklet than Dr. Edith Elmer Wood. A veteran in the housing movement for many years, she has known about the housing

problem from the point of view of the housewife, the alert citizen, and the social economist. As the author of several important books on housing, as University lecturer on the economic and social aspects of housing, and more recently as an adviser to the Housing Division of the Public Works Administration, Dr. Wood speaks with authority on this subject. Although Dr. Wood is a consultant to the United States Housing Authority, it should be pointed out that the *opinions* expressed in this booklet are hers, and not necessarily those of the United States Housing Authority.

A handwritten signature in black ink, reading "Nathan Straus". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

NATHAN STRAUS,
Administrator.

FEDERAL WORKS AGENCY
UNITED STATES HOUSING AUTHORITY
DECEMBER, 1939

Introduction

Why is the housing problem important?

A. *To the individual?*

Because:

1. A man working 44 hours a week, 50 weeks in the year, 30 minutes distant from home, spends from a minimum of one-third to a maximum of substantially over two-thirds of his time at home. Illness or unemployment increases the fraction.

2. A homemaking woman spends from two-thirds to nineteen-twentieths of her time at home.

3. A preschool child spends from two-thirds to nineteen-twentieths of his time there.

4. A school child spends from half to more than three-fourths of his time there.

B. *To the family?*

Because:

1. All its functions, biological, social, and administrative, center in the home—eating, sleeping, procreation, child nurture, preparation of food, and care of clothing.

2. Its health, comfort, social and civic life, in short its degree of civilization, depend very largely on qualities inherent in the structural plant which forms its shelter.

C. *To the community?*

Not only because:

1. More of its area is used for housing than for any other purpose.
2. Residential property contributes about half of its real-property-tax income.
3. Services for residential areas (including schools) consume somewhat more than half of the community income from real-property taxes.

But also because:

4. The most important function of any community is to build, maintain, and protect its homes and the families within them. Industry, business, and government are means toward this end.

D. *To the Nation?*

Not only because:

1. Residential construction is one of its major industries and one worst hit by the depression of the early 1930's.
2. Past cycles of activity and inactivity in residential construction have preceded eras of national prosperity and hard times with a rhythm suggestive of some causal relationship.

But also because:

3. The fundamental purpose of organized society is to produce a better crop of children ¹ by teamwork

¹ U. S. DEPT. OF AGRICULTURE, ANIMAL HUSBANDRY DIVISION, *Farmers' Bulletin No. 1350, Beef Cattle Barns*: "There are three elements which are essential to animal life, namely, feed, water, and air, and upon the quantity and quality of all three depends the physical welfare of the animal . . . In order that they may be productive they must . . . have an abundance of fresh air."

Farmers' Bulletin No. 1393, Principles of Dairy Barn Ventilation: "The stabling of animals in dark, poorly ventilated, damp barns affects their health

and technology than was attainable through the rugged individualism of the stone-age hunter.

4. Homemaking women, raising children, are the largest occupational group in the population. They are producing, by all odds, the most important national asset. Their working places should conform *at least* to the requirements of industrial hygiene.²

and helps to spread tuberculosis among the stock whenever the germs are present."

Farmers' Bulletin No. 1419, Care and Management of Farm Work Horses: "Abundance of light and proper ventilation of the stables are essential for complete sanitation and the health of the horse."

Farmers' Bulletin No. 810, Equipment for Farm Sheep Raising: "Dryness, good ventilation, and freedom from drafts are the first requisites of buildings for sheep."

Farmers' Bulletin No. 1487, Practical Hog Houses: "Proper housing is an important factor in the successful raising of hogs. If little pigs are to get the right kind of a start in life, they must have plenty of sunshine."

Farmers' Bulletin No. 1554, Poultry Houses and Fixtures: "Growing chicks and laying hens need comfortable houses that are dry and roomy, with plenty of fresh air and sunlight. It never pays to overcrowd them. The houses in which chicks are brooded and reared should be so constructed as to promote the most efficient growth in the chicks."

² U. S. DEPT. OF LABOR, BUREAU OF LABOR STATISTICS, *Minimum Standards or the Safety and Health of Workers in Manufacturing Industries, 1935:* These cover provisions for lighting, natural and artificial; ventilation, temperature, humidity, air space; number, type, and location of toilet facilities; cleanliness of premises and provisions for waste disposal; protection against fire; and prevention of accidents.

CHAPTER I

A Few Basic Facts About the American People

TO UNDERSTAND the housing problem requires a bird's-eye view of the American people and their incomes in a relatively normal year. Against this static picture later fluctuations may be measured. In addition, we must sense the processes of accelerating change which have operated throughout our history.

Once in 10 years the American people count noses.

Population of continental United States in 1930 was 122,775,046.

Private families, 29,904,663.

About $2\frac{1}{3}$ million private families consisted of one person.

About 3 million persons not classed among private families lived in hotels, boarding houses, and institutions.

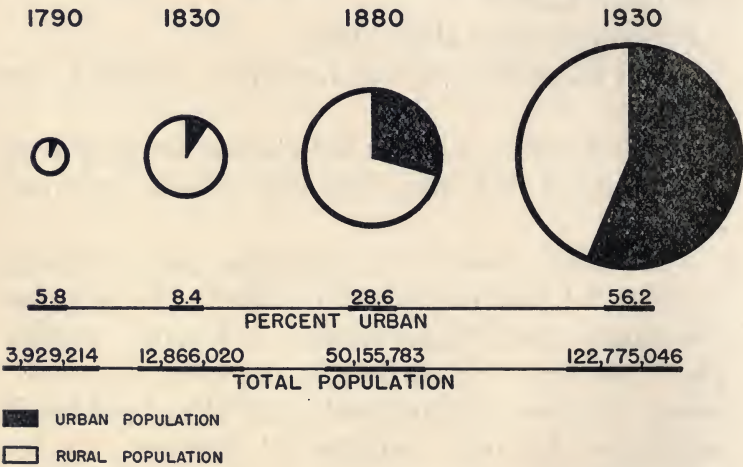
The median size of an American private family was only 3.4, foreign-born white families being a fraction larger and Negro families a fraction smaller. The "median," remember, is the middle one of a series. The average obtained by dividing total family population by total number of families is somewhat higher.

The change from rural to urban.

In 1920, for the first time, urban population exceeded rural. In 1930 the number of urban families, 17,372,524, exceeded the number of rural families,

12,532,139, by a larger proportion than the excess of urban population over rural, because farm families average larger. An incorporated community with only 2,500 inhabitants counts as "urban" by census definition, although in its social aspects it is not especially so. On the other hand, only about half the rural population live on farms. Many live in villages of less than 2,500 people which serve as shopping centers for surrounding farms. And many are suburbanites who have sought fresh air and elbow room outside the crowded cities where they earn their daily bread. Economically and socially, they have more in common with the urban than with the agricultural group.

CHART I.—POPULATION GROWTH AND URBANIZATION INCREASE, UNITED STATES, 1790-1930



FEDERAL WORKS AGENCY RESEARCH AND STATISTICS DIVISION
UNITED STATES HOUSING AUTHORITY RESEARCH SECTION AUGUST 1, 1939

Source: U. S. Bureau of the Census.

At least two-thirds of our people make their living in cities if we include the technically rural householders who are suburbanites. Some idea of the central-

ization involved may be gained from reflecting that of the more than 3,000 counties in the United States, the 155 containing the larger industrial cities in 1929 included 74 percent of all industrial wage earners and 81 percent of all salaried employees, and were responsible for 80 percent of the value added to manufactured products.

TABLE 1.—GROWTH OF CITIES 1790 TO 1930¹

POPULATION	Number of cities of specified population at various census dates			
	1790	1840	1880	1930
2,500–10,000.....	28	123	872	2,183
10,000–100,000.....	5	36	162	889
100,000–1,000,000.....		3	19	88
1,000,000, and over.....			1	5

¹ Source: National Resources Committee, *Our Cities*, 1937.

Popular fallacy No. 1.—That bad housing is a problem only in big cities.

Some people think it is a phenomenon peculiar to Europe, Asia, and the lower East Side of New York.

The fact is that it occurs, with variations of form and amount, all over this country and all over the rest of the inhabited world, in big cities and small cities, in villages and open country, east, west, north, south, and center.

Land overcrowding, with consequent dark and airless rooms, is characteristic of cities. Lack of sanitary means to dispose of human excreta and lack of safe and easily obtainable water supply are especially characteristic of rural areas. Workingmen's quarters in middle-sized towns sometimes combine both sets of defects. Dilapidation may be anywhere. Dampness may be anywhere. Vermin may be anywhere. Room overcrowding may be anywhere.

➡ **Popular fallacy No. 2.—That room overcrowding is peculiar to cities or increases with the size of a city.**

Contrary to the general impression, it is more prevalent in rural districts of our South and Southwest than in our big cities. This matter of room crowding is one point, however, in which American standards are definitely higher than European, with the possible exception of English and Dutch. Our lack of complete statistics makes exact comparison impossible. (See tables 8 and 9 in ch. V in this connection.)

Three out of four American families still live in single-family houses. Our census definition of a "dwelling" does not correspond to that of any other country in the world. Many useful housing facts may nevertheless be learned from the 1930 census. For instance, 76.4 percent of our families in 1930 still lived in one-family houses, even 63.3 percent of urban families.¹ As 16.5 percent of urban families lived in two-family houses, that left only 20.2 percent of urban families (12.1 percent of all families) living in multifamily houses. This makes some problems simpler than they otherwise would be. (Fifteenth Census of the United States, 1930, *Population Volume VI, Families*, table 13.)

Home ownership and tenancy.

The census tells us how many families are home owners and how many are tenants. It has been telling us that since 1890. Taking the country as a whole, it is surprising how little the proportions have changed. Just over half were renters throughout the period—52.2 percent in 1890 and 51.2 percent in 1930. But it is somewhat disquieting that farm

¹ New York City, in 1930, with the lowest percentage in the country, had 17.1 percent of its families living in one-family houses. The Borough of Manhattan had only 3 percent.

tenancy, which is undesirable, has increased, especially during the 1920 decade, while the sharp increase in urban home ownership during the same period, amounting to 3,500,000 dwellings, was followed by an avalanche of foreclosures. (See chapter X.)

It is difficult to avoid the conclusion that the increase in nonfarm home ownership during the 1920's, far from being a symptom of prosperity and healthy social advance, was fundamentally unsound, however we divide the responsibility between over-optimism on the buyers' part and high-pressure salesmanship on the venders'.

Rents and values in 1930.

The 1930 census, for the first time, gave the rental of all rented dwellings and the valuation of those owner-occupied. The figures refer to 1930, not to today. But it is useful to get some idea of how matters stood at that time. We can relate these rents and values to the income distribution figures (estimates only, but careful ones) offered by Brookings Institution for 1929. We can relate them also to such large-scale surveys of the physical condition of homes as the Real Property Inventory and the Farm Housing Survey.

TABLE 2.—RENTED NONFARM HOMES, 1930—PERCENT DISTRIBUTION ¹

Rent	Percent
Under \$20 per month.....	34.0
\$20-\$49.....	46.4
\$50-\$74.....	12.2
\$75 and over.....	4.8
Not reported.....	2.6
Total.....	100.0

¹ Source: Fifteenth Census of the United States, 1930, *Population Volume VI, Families*, table 23.

The class renting under \$20 per month, or 34 percent of all rented homes, were substandard under average American rental conditions at that date.² In the South the boundary would be at a lower figure, in many parts of the North at a higher one.

Owner-occupied houses were, as would be expected, of a better grade. Their median value was \$4,778 (urban \$5,743 and rural nonfarm \$2,661). Counting the equivalent rental at 1 percent a month, as is customary, only 18.1 percent of all owned nonfarm homes were comparable in poor quality to the 34 percent of rented nonfarm homes at the bottom of the list. Together, they count up to 6,093,314, or slightly more than a quarter of all nonfarm homes.

We shall find that rents fell during the depression along with incomes and have been rising with them again.

Geographic variations in house rents and values are great. Differences in climate account for only a part. Urban-rural variations are also great. These reflect not only differences in land cost, absence of sewers, water, pavements, and other urban improvements, but also distance from work and cost of commuting.

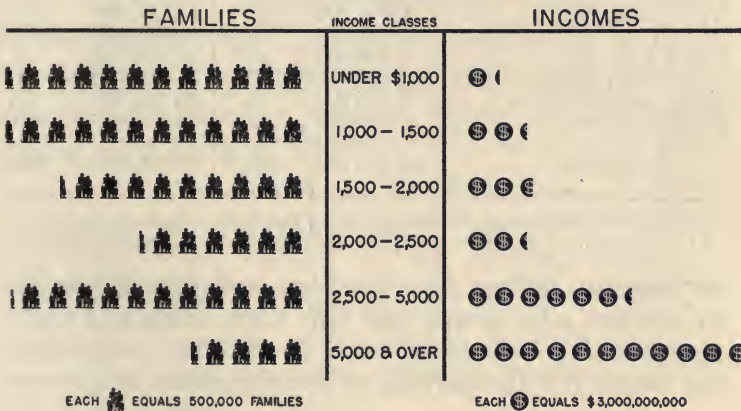
Distribution of family income in 1929.

Aside from its usefulness in association with the census year figures to establish a starting point, the income distribution of this, our most prosperous year in history, is important as indicating the best attainable under a system of *laissez faire*. In chapter XI will be found the most recent estimates of national income distribution (table 22).

² This estimate from census rentals, which may appear arbitrary, checks well with figures in the *Financial Survey of Urban Housing*, Department of Commerce, 1937, from which it appears that 35.2 percent of tenant families in the 22 representative cities studied lived in substandard houses.

More than one-fifth of all families had incomes under \$1,000, which in most parts of the country was below the subsistence standard. Slightly more than another fifth had incomes between \$1,000 and \$1,500, a range covering what was considered a fair wage for the support of two adults and two children. Nearly 60 percent had incomes under \$2,000, the point where appreciable savings first become possible. More than 71 percent had incomes under \$2,500, which is what many competent economists think our natural resources and our technology could and should earn for every self-supporting family, if they were wisely directed toward that end.

CHART II.—FAMILY¹ INCOME IN 1929



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RESEARCH AND STATISTICS DIVISION
RESEARCH SECTION AUGUST 1, 1939

¹ Excludes one-person families and families with “under 0 incomes.”
Source: America’s Capacity to Consume, Brookings Institution, 1934.

If the problem of distribution of income were solved, the housing problem would become only an educational one concerned with standards.

Various recent progressive measures—social insurance, wage-and-hour legislation, wider collective bar-

gaining—are moving slowly in the direction of such a solution. Subsidized public housing for the lower income groups, advancing simultaneously, provides (at a point where it is especially needed) an immediate means of increasing real wages, as distinguished from money wages, by giving tenants worth-while homes instead of slum shelter for their same rent dollars.

TABLE 3.—NUMBER AND PERCENT OF FAMILIES ¹ BY INCOME CLASSES IN 1929 ²

Income class	Total in each class		Cumulative totals	
	Number	Percent	Number	Percent
Under \$1, 000.....	5, 899, 000	21. 5	5, 899, 000	21. 5
\$1, 000 to \$1, 500.....	5, 754, 000	20. 9	11, 653, 000	42. 4
\$1, 500 to \$2, 000.....	4, 701, 000	17. 1	16, 354, 000	59. 5
\$2, 000 to \$2, 500.....	3, 204, 000	11. 7	19, 558, 000	71. 2
\$2, 500 to \$5, 000.....	5, 660, 000	20. 6	25, 218, 000	91. 8
\$5, 000 to \$10, 000.....	1, 625, 000	5. 9	26, 843, 000	97. 7
\$10, 000 and over.....	631, 000	2. 3	27, 474, 000	100. 0
All classes.....	27, 474, 000	100. 0	27, 474, 000	100. 0

¹ One-person families are excluded from the Brookings estimate.

² Condensed from *America's Capacity to Consume*, Brookings Institution, 1934.

Popular fallacy No. 3.—That subsidized housing for workers who cannot pay rent high enough to secure good housing on a profit basis is, in effect, subsidizing low wages for the benefit of parsimonious employers.

Our hitherto complete lack of subsidized housing has certainly not produced wages for the rank and file high enough to secure good housing. Still, there might be some basis for argument that subsidized housing would tend to freeze wages at their present level, if simultaneous advances were not being made in wage-and-hour legislation and in collective bargaining.

CHAPTER II

What Sort of Homes Do the American People Live In?

One-third good

One-third fair

One-third bad

THE REAL PROPERTY INVENTORY has been among the most useful byproducts of the depression. The need of projects for white-collar unemployed made possible the very large-scale housing market survey known as the Real Property Inventory. It was planned by a hardheaded, mortgage-financing, real estate and operative builder group, wholly unconnected with housing reform. The work was carried out under the Bureau of Foreign and Domestic Commerce of the Department of Commerce. Sixty-four cities were chosen in 48 States, ranging in population from Cleveland, just under a million, to Santa Fe, N. Mex., with 11,000, a cross section of our urban communities, omitting only the largest and the smallest.

Every residential structure in each city was visited and a large body of information about it was recorded. The field work was done by local people, but the schedules came from Washington, as did the instructors who trained the local staffs. Tabulating and editorial work were done in Washington.

Failure to consult the housing group while the schedule was in the making led to the omission of such important data as the number of dark rooms,

the presence of lot overcrowding, the occupation of cellars or basements as dwellings. Such points have a close connection with health.

It has been an advantage, however, to have had the Real Property Inventory conducted by business men instead of reformers, not because the job was necessarily any better done, but because no one could accuse those who did it of a sentimental bias.

The 64 cities of the Department of Commerce Real Property Inventory (1934) had a population in 1930 of 7,711,170, and contained something like 12 percent of all urban dwellings in the United States, a sample of highly respectable size.

TABLE 4.—REAL PROPERTY INVENTORIES

Item	Original 64 cities (1934) ¹	139 other urban areas (1934-36)
RESIDENTIAL STRUCTURES		
Total number.....	1, 491, 223	3, 612, 242
Percent of total:		
In good condition.....	37.0	39.8
Needing minor repairs.....	44.9	44.7
Needing major repairs.....	15.8	13.2
Unfit for use.....	2.3	2.3
	100.0	100.0
DWELLING UNITS		
Total number.....	2, 102, 776	6, 272, 621
Percent of total:		
Crowded or worse (occupied dwellings only) ² ..	16.8	15.9
Without private indoor flush toilet.....	13.5	14.9
Without bathtub (or shower).....	20.2	19.7

¹ Cities proper, excluding suburban zones.

² Includes the classes "crowded" (with more persons than rooms, but not more than twice as many), "overcrowded" (more than twice as many persons as rooms, but not more than three times as many), and "greatly overcrowded" (more than three times as many persons as rooms), as defined in the Real Property Inventory summary volume.

Since that time, many more Real Property Inventories have been carried out under State and local auspices, using the schedules (items of information) and instructions originally set up (with minor modifications in certain cases), so that we now have reasonably comparable data concerning nearly four times as many dwelling units, which is a very large sample indeed. According to a summary volume, *Urban Housing*, (Works Progress Administration, 1938), the coverage is 44 percent of urban United States. The degree of correspondence between the more recent surveys and those of the original 64 cities is striking. (See table 4.)

The designation "unfit for use" was very conservatively applied in R. P. I. practice, so that it was nearly equivalent to the building code term "structurally unsafe"—that is, liable to collapse. If it was physically possible to repair a dwelling, whether it appeared to be worth repair or not, it went into the "major repairs" class. These two groups, making a combined 16.2 percent of all structures surveyed, are clearly substandard and in most cases unredeemable except by demolition and replacement. For where roofs leak, foundations are cracked, plaster is falling, stairs are rickety, bricks need repointing, wood is rotting, repairs seldom justify their cost.

Moreover, these structurally neglected dwellings are usually (though not always) the same ones which have also been neglected in the matter of modern improvements. To a large extent they fall in the class without bathtubs, without sewer-connected toilets, without modern heating. Sometimes they also lack electric lights and running water.

Crowding is a matter of occupancy, not of structure. But most of it is apt to take place in these substandard houses.

GEOGRAPHIC DIFFERENCES IN HOUSING CONDITIONS

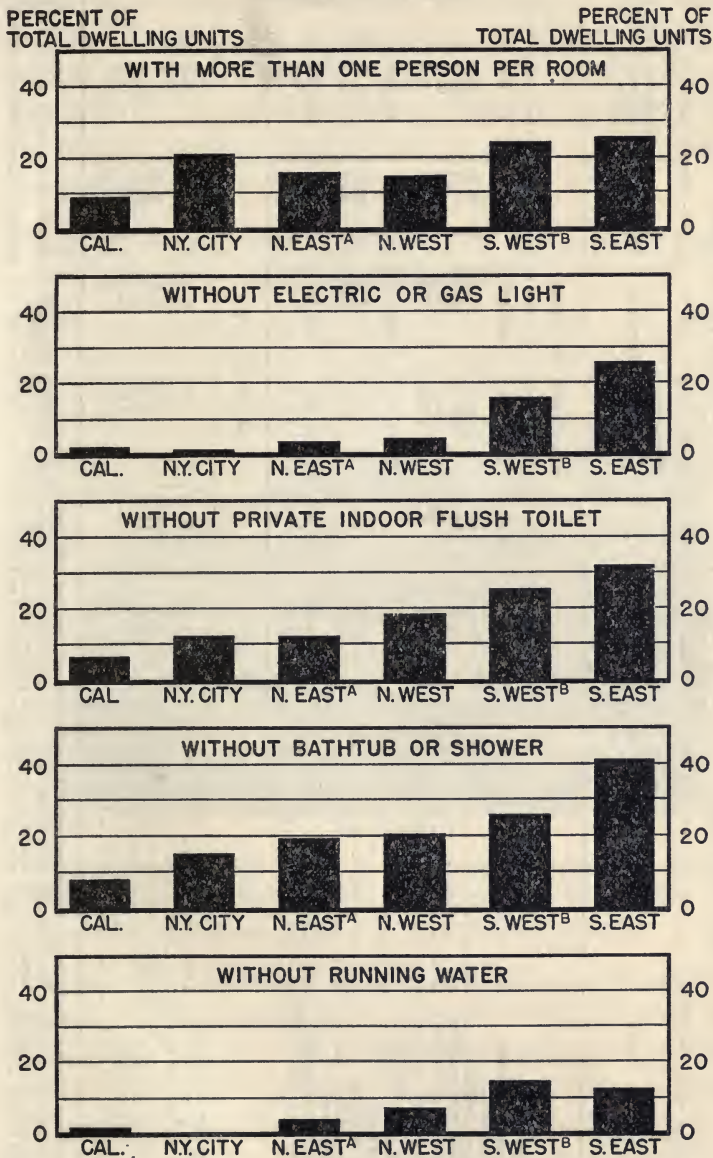
So far we have dealt with national averages. It would be a serious mistake, however, to suppose that every city or most cities conform to them. In the first place, there are wide geographic differences, as is clear from table 5. Within the same general region, moreover, there are often sharp individual differences between city and city.

The 203 real property inventories analysed in the convenient summary already quoted, *Urban Housing*, have been grouped geographically into unequal quadrants bounded roughly by the Mississippi and Ohio Rivers and their imaginary extensions, along nearest State lines. New York City and California were considered sufficiently different for separate classification. New York City contains almost as many dwelling units as the original 64 cities combined. It would, therefore, tend to throw any regional picture out of focus.

This table suggests that the highest standard of housing for the working classes will be found in California and the next highest in the Northeastern States, with New York City included. The lowest standards are unquestionably in the Southeast and Southwest. If the R. P. I. had shown dark rooms and overcrowded building lots, however, the Northeastern cities, and especially New York, would have lost some of their lead.

The inclusion of the items "more than 40 years old" and "containing one, two, or three rooms" is not meant to imply that either *necessarily* involves bad housing. There is a perfectly legitimate demand for one- and two-room dwellings for single persons and childless couples, and three rooms may serve for parents and

CHART III.—URBAN HOUSING CONDITIONS, BY GEOGRAPHIC AREA



FEDERAL WORKS AGENCY RESEARCH AND STATISTICS DIVISION
UNITED STATES HOUSING AUTHORITY RESEARCH SECTION AUGUST 1, 1939

Notes: A—Excludes New York City. B—Excludes California.

Source: Urban Housing, 1934-36, Works Progress Administration, 1938.

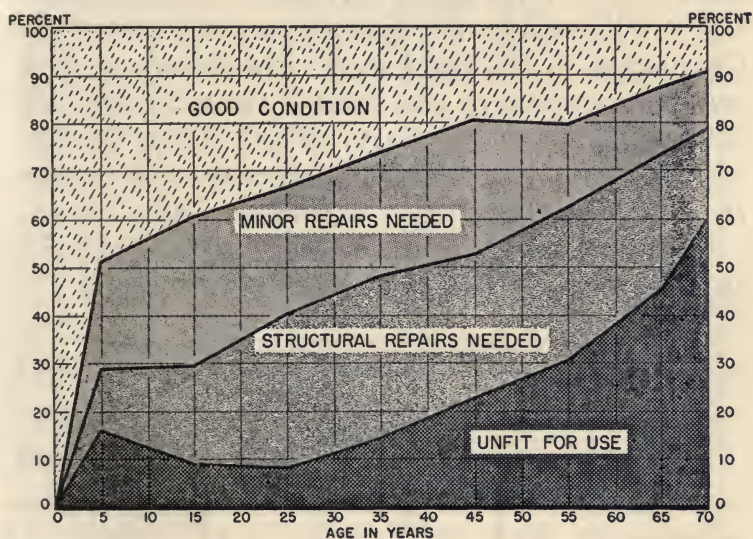
TABLE 5.—URBAN HOUSING CONDITIONS, BY GEOGRAPHIC AREA¹

Item	Total, all urban areas enumerated ²	Total, excluding New York City	New York City	Northeast, excluding New York City	Southeast	Northwest	Southwest, excluding California	California
RESIDENTIAL STRUCTURES								
Condition of structures:								
Total structures reported.....	5,097,523	4,503,086	594,437	2,875,986	468,838	824,338	175,090	158,834
Percent of total:								
In good condition.....	39.0	37.9	46.7	38.5	31.2	38.6	37.6	44.8
Needing minor repairs.....	44.8	44.7	45.6	44.9	45.6	44.2	42.9	41.9
Needing major repairs.....	13.9	15.0	6.3	14.1	19.8	15.4	16.7	11.8
Unit for use.....	2.3	2.4	1.4	2.5	3.4	1.8	2.8	1.5
Exterior material of structures:								
Total structures reported.....	---	4,505,486	---	2,877,452	469,128	824,911	175,087	158,908
Percent of total:	---		---					
Built of wood.....	---	69.4	---	64.7	81.9	76.8	76.3	70.1
Built of brick.....	---	23.2	---	29.9	14.4	10.4	16.1	1.5
Year of construction:								
Total structures reported.....	5,017,840	4,423,403	594,437	2,798,483	468,177	823,324	174,781	158,638
Percent of total: Built in 1894 or before.....	24.4	23.5	32.0	30.2	13.8	13.0	4.2	8.2
DWELLING UNITS								
Percent of total dwelling units:								
Crowded or worse (more than 1 person to a room).....	17.4	16.6	20.2	15.6	25.8	15.0	23.9	9.1
Without electric light or gas.....	4.4	5.6	.5	2.9	25.4	3.9	16.0	1.5
Without private indoor flush toilet.....	14.6	15.4	12.1	12.2	32.1	18.6	25.3	6.6
Without private bathtub or shower.....	19.9	21.6	15.0	19.5	41.0	20.7	26.1	8.0
Without running water.....	---	5.3	---	3.5	12.8	6.7	14.9	1.1
Containing 1, 2, or 3 rooms.....	---	17.8	---	13.4	31.8	23.4	29.2	25.5

¹ Source: *Urban Housing*, Works Progress Administration, Division of Social Research, 1938, pp. 14-23.² The Summary tables from which these data were taken cover, in general, 203 urban areas or places, of which 135 are in the Northeast (exclusive of New York City), 21 in the Southeast, 35 in the Northwest, 8 in the Southwest (exclusive of California), and 3 in California.³ The total number of dwelling units to which these percentages apply varies from 7,612,816 in case of "crowded or worse" to 8,361,715 in case of "without private indoor flush toilets."

one young child. Certain carefully preserved homes built in Colonial times are still among our most treasured examples of domestic architecture. But where extremely small dwellings are provided systematically for small incomes, without regard to size of family, or where old houses are also neglected houses, we encounter bad conditions.

CHART IV.—AGE AND CONDITION OF DWELLINGS,
DES MOINES, IOWA



FEDERAL WORKS AGENCY

RESEARCH AND STATISTICS DIVISION

UNITED STATES HOUSING AUTHORITY

RESEARCH SECTION AUGUST 1, 1939

Source: Report on Housing, 1935, Iowa State Planning Board.

Chart IV illustrates how rapidly the proportion of houses in bad structural condition increases with the age of the house. Note how the *unfit for use* class shoots up to 60 percent of dwellings 70 years old, whereas it is less than 10 percent of those between 15 and 25 years old. The rise to something over 15 percent among dwellings only 5 years old looks contradictory at first sight, but is explained in the text

of the Iowa State Planning Board's *Report on Housing, 1935*. It represents an outbreak of shacks built by depression victims in outlying districts of Des Moines, which were unfit from the start.

In the PWA Housing Division bulletin, *Slums and Blighted Areas in the United States* (1935), the present writer assembled, for ready comparison, the most socially revealing items in the original 64-city Real Property Inventory.¹ No single city has the best score or the worst under every head, but Binghamton, N. Y., makes the highest general average and Charleston, S. C., the lowest—Charleston, with its great historic charm and some of the most beautiful old residences in the country. Fortunately, Charleston has an active housing authority and a slum clearance program already well under way.

The difference in working class standard of living shown by the following figures is very striking.

TABLE 6.—PERCENT OF DWELLING UNITS

City	With 1, 2, or 3 rooms	Crowded or worse	With no running water	Neither gas nor electric light	No private indoor flush toilet	No bath or shower
Binghamton.....	7.1	10.7	0.4	1.8	2.0	7.0
Charleston.....	52.9	40.4	21.7	50.0	48.7	56.2

FARM HOUSING

Up to now we have been concerned with cities and their suburbs. Fortunately, in 1934 the Bureau of Home Economics of the Department of Agriculture sponsored a survey covering approximately an 8 per cent sample of farm housing in every State except Pennsylvania and New York. Table 7 summarizes some of the results.

¹ See Appendix B.

TABLE 7.—FARM HOUSING SURVEY, 1934¹

State	Total number of houses studied	Percent of total			
		Without water supply in house	Without bathtub	Without electricity	Without indoor flush toilet
United States, total....	595, 855	69. 6	88. 8	82. 2	91. 5
Alabama.....	21, 438	96. 6	98. 8	97. 3	99. 1
Arizona.....	840	58. 9	85. 0	83. 5	87. 1
Arkansas.....	20, 467	95. 2	97. 8	96. 0	98. 8
California.....	14, 177	9. 0	32. 2	12. 2	43. 0
Colorado.....	9, 664	71. 1	88. 1	83. 3	92. 1
Connecticut.....	1, 724	23. 2	67. 3	51. 2	71. 3
Delaware.....	2, 000	14. 2	91. 1	81. 2	94. 3
Florida.....	13, 058	55. 7	78. 6	73. 0	79. 5
Georgia.....	33, 139	93. 7	98. 2	96. 5	98. 6
Idaho.....	4, 458	67. 5	83. 2	65. 9	87. 6
Illinois.....	21, 318	49. 8	84. 1	79. 6	88. 8
Indiana.....	15, 755	48. 1	86. 3	75. 6	90. 5
Iowa.....	18, 763	43. 5	81. 2	73. 2	85. 2
Kansas.....	17, 929	63. 8	82. 1	81. 8	90. 7
Kentucky.....	22, 314	88. 7	94. 1	90. 6	94. 9
Louisiana.....	16, 402	92. 6	96. 1	95. 4	98. 1
Maine.....	2, 769	23. 4	83. 5	43. 0	81. 8
Maryland.....	7, 547	63. 6	84. 4	73. 1	85. 5
Massachusetts.....	2, 062	5. 3	56. 2	28. 8	58. 0
Michigan.....	17, 025	38. 6	85. 6	68. 6	87. 6
Minnesota.....	17, 310	55. 4	92. 6	85. 5	94. 0
Mississippi.....	21, 789	95. 3	97. 6	97. 4	98. 2
Missouri.....	28, 136	82. 2	92. 4	85. 4	94. 6
Montana.....	4, 053	69. 3	87. 4	80. 1	91. 0
Nebraska.....	14, 915	48. 7	80. 1	78. 9	87. 5
Nevada.....	1, 047	43. 3	64. 1	30. 1	73. 9
New Hampshire.....	2, 027	6. 9	73. 8	43. 6	76. 3
New Jersey.....	2, 033	14. 7	58. 1	31. 1	62. 5
New Mexico.....	2, 746	80. 8	89. 8	84. 4	92. 0
North Carolina.....	28, 199	76. 9	96. 8	90. 5	97. 1
North Dakota.....	7, 708	64. 6	94. 4	89. 3	96. 6
Ohio.....	18, 464	53. 3	89. 8	76. 6	91. 6
Oklahoma.....	13, 078	88. 9	94. 2	95. 0	97. 5
Oregon.....	5, 677	43. 0	67. 4	46. 4	74. 4
Rhode Island.....	2, 030	22. 2	58. 2	19. 9	57. 9
South Carolina.....	15, 505	86. 5	97. 4	96. 4	98. 3
South Dakota.....	11, 423	50. 4	88. 2	82. 2	91. 2
Tennessee.....	28, 085	91. 8	97. 3	94. 4	97. 9
Texas.....	46, 601	75. 7	88. 2	90. 7	94. 0
Utah.....	6, 022	39. 1	64. 8	8. 3	66. 6
Vermont.....	2, 216	14. 9	71. 1	52. 0	67. 4
Virginia.....	22, 974	83. 2	92. 4	86. 8	93. 1
Washington.....	7, 902	39. 4	66. 5	39. 8	75. 1
West Virginia.....	9, 425	76. 5	93. 1	82. 9	93. 4
Wisconsin.....	11, 246	42. 8	86. 2	63. 6	89. 4
Wyoming.....	2, 395	75. 1	91. 4	86. 8	94. 4

¹ Source: *The Farm-Housing Survey*, U. S. Dept. of Agriculture, 1939, Miscellaneous Publication No. 323, Bureau of Home Economics, in cooperation with the Bureau of Agricultural Engineering, Extension Service, and Office of the Secretary.

The lack of modern improvements in farm homes emerges clearly, and also the wide differences between geographic sections.

Among the farm homes studied, the average number of rooms was 5.4 and the average number of occupants per room 0.86. That sounds well, but does not tell the story. State averages begin to suggest it, because they vary from 3.3 rooms in Arizona to 10.4 in Massachusetts, and from 1.27 occupants per room to 0.46 in the same States. In 12 Southern and Southwestern States the average room density is more than one, a degree of congestion already risky to health. But since many families in those States do have ample space, many others must be grossly overcrowded to produce such an average.

Schedules carried a column for farm homes needing complete replacement in the judgment of the occupant, while an adjoining column recorded the opinion of the enumerator. The results were not considered sufficiently objective to include in the published report. Evidently higher standards were used in some States than in others. On the assumption that such variations would tend to cancel each other, national totals are not without interest. Replacement was desired by 9.4 percent of the occupants, while enumerators thought that 11.5 percent should be replaced. Both estimates are conservative.

A social research report on *Disadvantaged Classes in American Agriculture*, (Department of Agriculture, 1938) states that: "It is a conservative estimate that one-third of the farm families of the Nation are living on standards of living so low as to make them slum families."

Many farm houses, however, are sturdily built and need repairs and modernization, rather than demolition.

ONE-THIRD OF THE NATION

If the Real Property Inventory offers a fair sample of urban housing and the Farm-Housing Survey of farm housing, and if nonfarm rural homes average the same as urban homes, we should be leaning over backward to be conservative in saying that one-fourth of nonfarm homes and two-thirds of farm homes are substandard.

The *United States total* line in table 7 shows that nearly 89 percent of farm homes lack bathtubs, more than 82 percent lack modern lighting, in nearly 70 percent water must be carried in from outdoors. Modern toilet facilities are lacking in 91 percent of all farm homes. By rights, we should call 80 percent of farm homes substandard. And instead of classing nonfarm rural housing with urban housing, it should be placed about midway between farm and urban, for its lack of such modern improvements as depend on public utilities is known to be great.

Look back at table 5. The largest substandard class consists of dwellings without bathtubs—nearly 20 percent. Next come the dwellings needing major repair and unfit for use, together more than 16 percent, and those without proper toilet facilities, nearly 15 percent. While these groups are not mutually exclusive, neither are they coincidental. Remember, too, that dark rooms and overcrowded lots have not been recorded.

Two-thirds of farm homes would be more than 4 million. One-fourth of nonfarm homes would be more than 6 million.

The two together account for the homes of over 10 million families—that one-third of the Nation so often described as ill-housed.

CHAPTER III

How Did it Come About?

1. By permitting supposedly temporary, make-shift shelter to be put up, usually by the occupant himself, and never requiring its removal. Certain sod houses, dugouts, and prospectors' cabins in the Rocky Mountain States have remained in occupancy for more than a generation. Fringes of shacks occupied by Mexican and Chinese laborers surround prosperous California towns, with every prospect of permanent toleration. Oklahoma City has within its borders municipally owned camp sites, where homeless families are allowed to throw together any sort of hovel without benefit of water or sewer.

2. By permitting speculative builders to turn out quantities of shoddy houses for quick sale during periods of rapid expansion—which deteriorate so fast that their owners cannot keep them in decent repair and eventually give up trying.

3. By assuming that Negroes, or foreigners, or miners, or factory workers, or any other class of human beings, do not rate either plumbing or privacy, and erecting for their use long rows of extremely cheap and small wooden shells of houses in damp or smoky or otherwise unpleasant locations where land costs little. At their best many of these houses would not have qualified for farm animals under the Bureau of Animal Husbandry's specifications. But, in addition, many of them are old and dilapidated.



Typical New York City street of old-law tenements: The buildings cover as much as 90 percent of the lots. Many rooms are entirely windowless.



"Company housing" for workers in a sugar mill in Franklin, La. One room to a family—no gas, water, electricity, or plumbing.



Two-story brick alley dwellings, Washington, D. C. Built at the back of pleasant streets.



Outdoor toilets in Cincinnati's Basin District—"city conveniences."
This was part of the slum site cleared for Laurel Homes.



Jacksonville, Fla. Clutter of frame houses and privies in small southern city. A health and fire hazard.



Pittsburgh: Conditions typical of an eastern mill city. Homes straggle down the barren hills, blanketed in smoke from the works in the valley.



A Mexican family's shack, Austin, Tex.: Eight people living in two rooms on \$38 a month.

4. By the action of time, coupled with neglect, on originally good houses.

5. By permitting the continued use of houses whose design violates health requirements unknown at the time they were built. The old-law tenements of New York, with their windowless interior rooms, were considered sanitary when they were built. Everybody at that period shut his windows tight at night and fastened his shutters. So why not make bedrooms cozy and tight to start with by having them windowless? Incidentally, this permitted a thriftier coverage of long narrow lots.

6. Because changes in the character of a neighborhood making it less desirable as a place of residence—noise, dirt, smoke, traffic, invasions of business or industry—caused old residents to move outward to more agreeable sites on the city's outskirts and families of lower income to come in. That usually meant dividing up a one-family house for two or three families. Often this was done without the structural changes necessary for privacy or sanitation. As rents per family went down with the progressive deterioration of the neighborhood, more families were crowded in to maintain profits. Additions were built at the side or the rear of the houses. Gardens disappeared. More and more of the land was covered. Tax assessments rose because of congested use, and more intensive use followed because of increased taxes. It may be that the area is still assumed to be in a transition stage between residence and business or industry. But it is a transition that shows no sign of being completed under its own momentum. On the contrary, utter stagnation seems to have been achieved and nothing is active except the forces of decay. This is the typical

“near-in” slum, the ring of dry rot surrounding the central business district.

What is a slum?

This used to be a subject of much debate. Since the passage of the United States Housing Act of 1937, there is a legal definition:

“The term ‘slum’ means any area where dwellings predominate which, by reason of dilapidation, overcrowding, faulty arrangement or design, lack of ventilation, light or sanitation facilities, or any combination of these factors, are detrimental to safety, health, or morals.”(*U. S. Housing Act of 1937, Sec. 2 (3).*)

“Blight” is a broader, but also a milder term. It may apply to an area wholly commercial or industrial, which slum cannot. A blighted area is one on the down grade, though not necessarily all the way down.

■ **Popular fallacy No. 4.—That slums are made by the people who live in them.**

This is a favorite alibi of owners and agents for not repairing their property and of the general public to excuse its indifference. Such convenient phrases as “They use bathtubs to store coal in,” or “They would turn model housing into slums in 6 months,” die hard.

Obviously, tenants cannot be responsible for defects inherent in the plan of the building—for too great coverage of the lot by the building, for interior rooms, for lack of toilets or bathtubs, or for firetrap construction. What the tenants are really being accused of are destructiveness and bad housekeeping. Both, of course, exist and are not confined to the

slums, though it is quite possible that slums contain more than their quota.

British and Dutch experience indicates that approximately 90 percent of transplanted slum residents respond satisfactorily to their new environment—occasionally 95 percent. In general, the quickness and completeness of response varies inversely with the age of the individual. Old people do not change their habits easily, but children adapt themselves promptly to new environment.

Could the development of slums have been prevented?

If communities had had the forethought to plan their development in advance, setting aside appropriate areas for business, industry, and residence, reserving sufficient space for parks and playgrounds and public buildings; if they had adopted building codes and health codes before they started building; if they had prevented the over-intensive use of land before it created vested interests, and had made speculation in real estate impossible, our vast, dreary, sprawling slums never could have developed. But we should still need to find some nonprofit method of supplying homes to low-income families whose rent-paying capacity offers no inducement to private industry to build for them.

🐉 **Popular fallacy No. 5.—*That the enforcement of existing or procurable restrictive legislation would eliminate slums by exercise of the police power without the use of public funds.***

Police power, in the language of constitutional law, is the power to promote the public welfare by *restraining* and *regulating* the use of property in the interest of public health, safety, and morals.

Restrictive legislation includes health, fire, and building codes, tenement house and multiple-dwelling laws, zoning ordinances, and official, enforceable city plans.

Such measures are absolutely necessary for civilized urban life. But it is a fallacy to suppose that any amount of regulation with any amount of enforcement would ever, of itself, solve our housing problems. Such action is negative. It prevents the bad. It cannot create the good.

Every compulsory rise of standard means an increase in the cost of construction, and every increase in the cost of construction means higher rents or purchase price for new housing. That in turn is followed by higher rents in old housing all the way along the line. Unless some method outside the profit system is operating to supply satisfactory housing to low-income families, housing improvement by exercise of the police power soon reaches an impasse.

No restrictive law can be enforced to the point where it would leave a section of the population homeless. Only if public housing is available for families with incomes too low to set in motion the wheels of private enterprise, can the police power be energetically exercised against unfit houses.

Popular fallacy No. 6.—*That raising the legal minimum requirements for light, air, plumbing, or fire protection in new buildings automatically outlaws the mass of existing buildings which do not conform to them.*

It is hard enough to raise legal requirements for future building, as it is. It would be impossible if the requirements were retroactive.

The double standard in structural requirements.—

When the New York Tenement House Law was passed in 1901 and the Multiple Dwellings Act in 1928, the important advances achieved were found in the sections dealing with buildings "hereafter erected." Some mild improvements were ordered for old buildings, but not such as to involve serious structural changes or dislocate rents. Laymen keep talking about the old tenements that have been "outlawed" in New York since 1901. They were never outlawed at all. It was the building of more like them which became illegal.

Builders and landlords.

Those who make a living by supplying, whether more or less acceptably, the shelter needs of the community, fall into two distinct groups, builders and landlords, whose interests are by no means always identical, though they are always ready to combine to repress any stirrings of consumer revolt.

A housing shortage spells heaven to both groups: To the landlord, because he can increase rents, spend a minimum on repairs, pick and choose his tenants, and still have no vacancies; to the builder, because people are being harried by the landlords into wanting to buy houses, and it will soon pay him to start building them. He is slow about beginning, because he has to take considerable risk if he is one of the first. He would prefer watching how things go with other builders—and so would they. "After you, my dear Alphonse." Anyhow, the longer they wait, the more shortage there will be and the more eager and less critical the buyers. At last, however, to the regret of the landlord, the building boom gets going. Once launched, it keeps on going until the effective demand is oversupplied. Then the builders must hibernate until the surplus has been absorbed.

The landlord's happy days were over sooner. He had vacancies, found tenants fussier, had to redecorate and eventually to lower rents. The sun had set for him too. Together the landlord and the builder await the dawn of a new day—the appearance of a new shortage.

Real estate speculation.

One part of the real-estate business is acting as agent or manager for the owner. That is not speculative. It is the real-estate operator who makes fortunes or doesn't. The real-estate "deal" is the lineal descendant of the horse trade. Its motto is *caveat emptor*. It is highly speculative and highly predatory. The horse trader was embalmed in that best seller of a generation ago, *David Harum*. The "realtor" earned a Nobel prize for his laureate more recently. Long before, Dickens had pilloried an extreme brand of real-estate promotion in *Martin Chuzzlewit*, and Upton Sinclair's *Jungle* hinged as much on a vicious home-purchase and foreclosure system as on the stockyards. Henry George built a whole system of economics around recapturing for the people the "unearned increment" which the speculator in real estate had absorbed. The lure of getting something for nothing is still exceedingly strong.

Most of the owners of near-in slum property acquired it and have held on to it because of their faith that sooner or later it would be in demand for skyscraper office buildings at Broadway frontage prices. Most of them would have been doomed to disappointment even if American cities had continued to grow at the miraculous rate of the past century. But a few of them would have drawn a *grand prix*, and the rest would have kept hoping. It used to be part of

the weird local loyalty we cultivated for every inhabitant of every village to believe it was on the way to become a large city, and for every inhabitant of a city to be sure it would one day be the biggest city in the world. The depression punctured some of that. And then perhaps we are growing up.

It was not only the owners who were over-optimistic about slum property values. Banks and insurance and trust companies, which ought to have known better, invested in first mortgages on slum property scaled to hypothetical future values which far exceeded actual present worth. Much of it they now own, to their regret. City tax assessors were naturally glad to concur with the owners and bankers in setting a high valuation on these worn-out properties. Of late years, however, their collections have been small.

The halt in immigration dramatized the close of our period of rapid population growth. A falling birth rate accentuates the trend. The vogue for vertical building in central business districts has diminished what horizontal spreading there might otherwise have been.

When people find they have bought worthless stocks, they write off their losses and do not expect the community to reimburse them. Where fictitious values have been attached to slum sites, should they not be written off in the same way? Otherwise our cities are headed for bankruptcy. With an era of stabilized population rapidly approaching, with very little need to expand business districts, and with some tendency for industry to decentralize, private enterprise builds new home districts peripherally or along lines of transportation. The population moves ever farther from the center, and the concentric rings of rot grow wider and emptier. The disease will not cure itself. It needs surgery.

CHAPTER IV

What Are the Present-Day Health Requirements for Housing?

HEALTH REQUIREMENTS advance with the advance of knowledge.

Popular fallacy No. 7.—*That because even the wealthy and powerful among our great-grandparents got on without plumbing, it is no hardship for working people to do without it today.*

The ancestral death rate was three or four times what ours is. If democracy means anything, it means equal opportunity in the matter of human life. Public health means everybody's health.

The Committee on the Hygiene of Housing of the American Public Health Association¹ recognizes that—

“Shelter is one of the three fundamental needs of human existence”—

and that—

“No housing program can be sound unless the shelter it provides is healthful.”

It recognizes that health is something positive, something more than the absence of disease. Mental health is as important as physical health. Accidents, as well as contagion, are health hazards.

Highly condensed and admittedly awaiting further

¹ *Basic Principles of Healthful Housing*, Preliminary Report of the Committee on the Hygiene of Housing, C.-E. A. Winslow, Chairman, Journal of the American Public Health Association, March 1938. Also Second Edition, Appendix A, *Practical Standards for Modern Housing*, National Association of Housing Officials, March 1939.

research at certain points, the committee's logical and illuminating formulation of principles has immediate importance for the consumer public in guiding its selection of a home, as well as for those concerned with supplying shelter.

The only way to give any idea of its scope is to quote the 30 requirements which it lists under 4 heads, attempting only the briefest running comments. The requirements are in italics.

1. Fundamental physiological needs:

(1) *Maintenance of a thermal environment which will avoid undue heat loss from the human body.*—This calls for reasonable nonconductivity of walls, ceiling, and floor, and an appropriate means of supplying the amount of artificial heat in winter which local climate demands.

(2) *Maintenance of a thermal environment which will permit adequate heat loss from the human body.*—This converse requirement is for keeping cool in summer. Adequate ventilation, specifically cross-ventilation, is the method advised.

(3) *Reasonably pure air for breathing purposes.*—This means not only fresh air, but air containing a minimum of dust and smoke, and free from noxious fumes. The replacement of stale air by fresh is made possible by sufficient window space in relation to floor space. Freedom from smoke, dust, and fumes depends on neighborhood conditions outside the house.

(4) *Adequate daylight illumination.*—Again we meet window area in relation to floor area and room depth. But adequate daylight illumination also depends on the open space outside—on the distance of the nearest building in relation to its height above the window admitting the daylight.

(5) *Direct sunlight*.—This is a matter of orientation (placement of buildings with regard to the points of the compass) and also of outside open space in relation to height of buildings. To permit the entrance of direct sunlight through street-floor windows in the temperate zone during the winter requires roughly that the width of such open space should equal the height of the obstructing building. Sunlight is the greatest of germicides. Its ultra-violet rays help to prevent rickets in young children. Its stimulating and cheering effect on morale would qualify it for listing as a psychological need.

(6) *Adequate artificial illumination*.—Badly placed lights result in glare. Inadequate lights produce eye strain. School children need good light for their home work, the housewife needs it for cooking and dishwashing, all members of the family for reading, writing, or sewing.

(7) *Protection against excessive noise*.—It is only recently that noise has been recognized as something more than an annoyance. Careful scientific studies have shown the damage it can do to the human nervous system. The child in the noisy tenement may sleep, but does not rest completely. Street noises or boiler-shop noises age the arteries prematurely. We are again on the border line of the psychological.

(8) *Provision of adequate space for exercise and for the play of children*.—This is a requirement of far-reaching importance. No one disputes that play is necessary for the normal development of children, or that play requires space, which should be available both indoors and out. That older persons also derive great benefit from an adjacent bit of outdoors, is hardly questionable.

2. Fundamental psychological needs:

(9) *Provision of adequate privacy for the individual.*—Room overcrowding and the elementary decencies come in here. The current English legal standards as to “person-per-room density” are commended, —not more than two persons occupying one sleeping room, with children under 10 counting as half-persons and infants under one not counted. The question is raised whether the age for separation of the sexes should not be lower than ten years. Entirely apart from decency, all human beings need some opportunity to be alone from time to time. A goldfish bowl is not an ideal home even for goldfish.

(10) *Provision of opportunities for normal family life.*—On the other hand, there can be no real family life without the opportunity to be together. Meal-time is a natural meeting time. But being together at meals implies sufficient space and sufficient furniture. Many low-income families do not have enough chairs or a large enough table for all the family to sit down to a meal at once, nor space enough to contain the chairs and table if they owned them. Similarly, being together for leisure time activities requires something more than enough cubage to prevent asphyxiation. And well-rounded family life cannot exist without space enough for occasional hospitality to outside friends.

(11) *Opportunities for normal community life.*—This implies living in a normal, which is to say a socially wholesome neighborhood, with educational and recreational opportunities for all members of the family.

(12) *Facilities for the performance of household tasks without undue physical or mental fatigue.*—We have been accustomed to think of conveniences and

labor savers as nice if you can afford them, but a bit of a luxury. Our grandmothers did not have them, so we can do without. So we can if we have to. But it is time we learned to think of them in terms of health. Excessive hours, unnecessary fatigue, unnecessary nervous strain, are just as bad for the housewife as for the factory worker. If the housewife is also a mother, the interest of society in her welfare is even greater.

(13) *Facilities for maintenance of cleanliness of the dwelling and of the person.*—Presumably cleanliness of clothing and household linen are intended to be included. It is interesting that this item should come here rather than under protection against contagion. Twenty gallons of water per day per person, hot and cold, and a bathtub or shower for each family are stipulated.

(14) *Possibility of reasonable esthetic satisfaction in the home and its surroundings.*—There is much in this item which hooks up with mental health and successful family life, which obviously should be attainable at all income levels.

(15) *Concordance with prevailing social standards of the local community.*—This is the only one of the 30 points on which the commentator entertains doubts. It sounds too much like “keeping up with the Joneses.”

3. Protection against contagion:

(16) *Provision of a water supply of safe, sanitary quality, available to the dwelling.*

(17) *Protection of the water supply system against pollution within the dwelling.*

(18) *Toilet facilities of such a character as to minimize the danger of transmitting disease.*—A private

toilet for every family is the first requirement, with sewer connection where sewers exist.

(19) *Protection against sewage contamination of the interior surfaces of the dwelling.*

(20) *No insanitary conditions in the vicinity of the dwelling.*—These include conditions on the premises, as uncovered garbage or overflowing cesspool. They may also include neighborhood conditions over which the householder has no control.

(21) *Exclusion of vermin which may play a part in the transmission of disease.*—Screening keeps out flies and mosquitoes. Solid construction and tight joints are required to make a house ratproof. Freedom from bedbugs requires continued vigilance.

(22) *Provision for keeping milk and other food undecomposed.*—It is noteworthy that the means by which the objective is obtained are not stipulated. If a ventilated larder serves the purpose in a cold climate during the winter months, well and good. But it will not be safe in summer.

(23) *Sufficient space in sleeping rooms to minimize contact infection.*—Experience in barracks and institutions has shown the danger of contagion by mouth spray where beds are not at least three feet apart. A sleeping room should have a minimum of 50 square feet floor space per occupant. Double-decker beds are disapproved.

4. Protection against accidents:

(24) *Use of such building materials and construction methods as will minimize the danger of structural collapse.*

(25) *Control of conditions likely to cause fires or promote their spread.*

(26) *Adequate facilities for escape in case of fire.*

- (27) *Protection from electrical shocks or burns.*
(28) *Protection from gas poisoning.*
(29) *Protection against falls and other mechanical injuries in the home.*

(30) *Protection of the neighborhood against the hazards of automobile traffic.*—This is another instance of the impossibility of really good home conditions without good neighborhood conditions. Automobile traffic should be routed around, not through, a residential area. The Radburn superblock, with its interior park safe for children and other pedestrians is one solution of this problem. If urban life is to endure, it must find a way to recapture some of the nerve-relaxing security of the countryside.

Out of the fullness of living, which is health, comes the joy of living. Out of it also comes efficiency—whether in school, factory, office, or home. The individual has a right to his health and joy in life. The Nation has need of his efficiency.

“What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom.” So wrote Adam Smith, father of orthodox economics, in *The Wealth of Nations*.

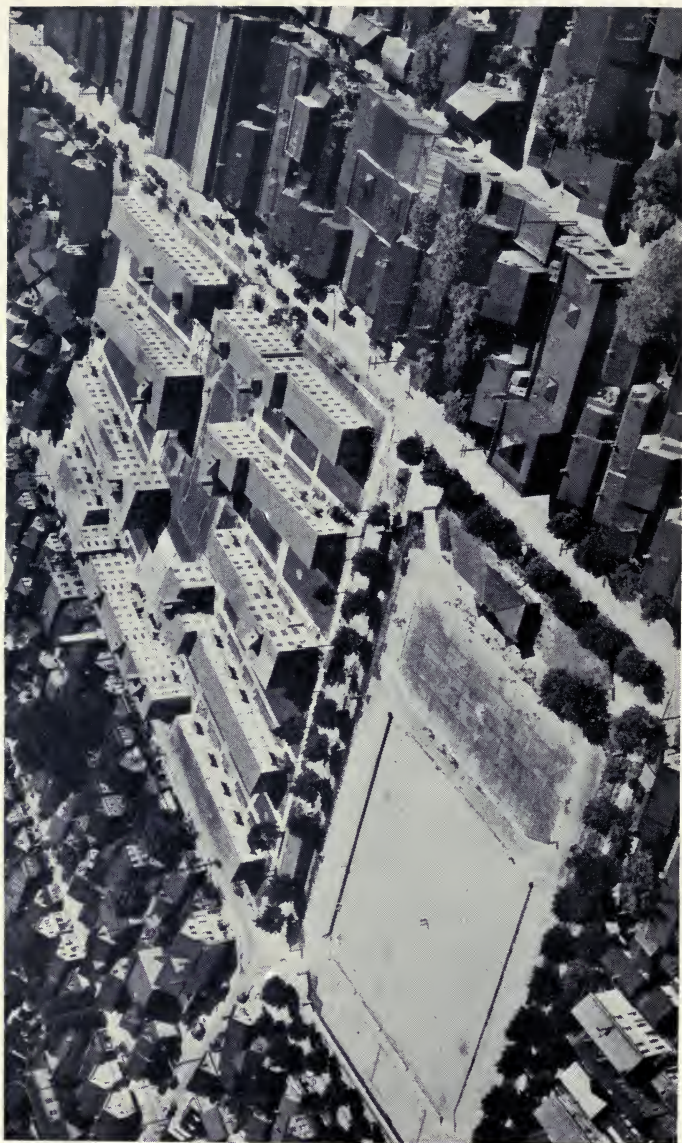
Every prudent private family seeks a home conducive to the mental and physical health of all its members, but especially of its children. It can scarce be folly for the Commonwealth to pursue the same objective.



Chicago: Four families live in these two houses—seven people on the top floor of the house at the left. Note the broken steps: From these houses and others like them, as well as from Trumbull Park Homes (see next picture) come workers for neighboring factories.



Trumbull Park Homes, PWA Housing Division development, managed by the Chicago Housing Authority under lease agreement with the USHA.



Air view of Willert Park, Buffalo, N. Y., one of the first five projects to be opened under the USHA program.

CHAPTER V

How Do Health Experts Rate Our Housing?

Adequacy of Urban Housing in the United States, as Measured by the Degree of Crowding and the Type of Sanitary Facilities, is the title of Bulletin 5 of the preliminary reports of the National Health Survey. It was published in May 1938.

The National Health Survey was conducted during the winter of 1935-36 by the United States Public Health Service, with financial grants from the Works Progress Administration.

It involved a house-to-house canvass of 800,000 families, including 2,800,000 persons in 84 cities and 23 rural areas in 19 States. The sample was not quite 5 percent of the urban population of the United States, less than half the size of that covered by the original Real Property Inventory of 64 cities. But as the cities were carefully picked to afford a cross section of the Nation, there is no reason to doubt that the Health Survey is representative. The rural areas, on the other hand, were merely special studies. In cities of over 100,000 inhabitants, random samples of census enumeration districts were covered 100 percent. In all smaller communities the coverage was complete for each city.

Data obtained from the families surveyed include:

1. A great deal of personal information (covering race, family make-up, occupation), income, rent, number of rooms, and type of toilet facility.

2. A record of illness or disability of every member of the family on the day of the visit, and of disabling illnesses lasting 7 days or more during the preceding 12 months, as well as serious permanent physical impairments.

3. Facts about kind and amount of medical care, nursing service, and hospitalization during the preceding 12 months.

The two important housing items included in the study show—(1) the extent of room congestion, (2) the extent of substandard types of toilet.

It was explicitly recognized that many other health hazards are found in deficient housing, such as lack of light, lack of ventilation, dilapidation—to name only a few. If it had been possible to record them all, the percentage of deficient housing indicated would have been substantially higher.

The bulletin affords a useful preliminary analysis of these two categories of substandard housing by geographic area,¹ size of city,² family income,³ and color, as well as by individual city and by rural area.

CROWDING

The definition adopted in respect to “crowding” is the same as that used in *Real Property Inventory 1934* (Summary and 64 Cities Combined).⁴ Room crowding begins when there are more persons than rooms (e. g., 5 adults to a 4-room home). For higher degrees of congestion, the classification is different. The Health Survey, quite understandably, introduces the class “more than one and one-half persons

¹ East, Central, West, and South.

² Population of 500,000 and over, 100,000 to 500,000, 25,000 to 100,000, and under 25,000.

³ Relief families; nonrelief families with incomes under \$1,000, \$1,000 to \$2,000, \$2,000 and over. For the individual cities, the income class \$2,000 to \$3,000 is also distinguished.

⁴ See footnote 2, table 4, p. 10.

per room" (as 7 persons in 4 rooms), which the R. P. I. lacks. It does not go beyond "two or more persons per room," whereas the R. P. I. has a class "more than three persons."

There is no important difference between the two surveys in classification of sanitary facilities.

Popular fallacy No. 8.—That the criteria of crowding refer to individual bedrooms.

The critic asks sarcastically whether a bedroom occupied by a husband and wife, or by two brothers or two sisters is to be called "crowded" and therefore substandard? The layman should understand clearly that person-per-room density means the average in a given household obtained by dividing all the persons in the family by all the rooms in the house (not counting bathrooms, halls, or storage spaces). In counting persons, children between 1 and 10 years are usually counted one-half and infants under a year old are not counted at all.

On the assumption that the sample studied is representative, the report concludes that:

"3,000,000 urban families in the United States have fewer rooms in their homes than there are persons.

"1,000,000 live in dwellings with more than one and one half times as many persons as rooms.

"700,000 live in dwellings with at least twice as many persons as rooms."

Of the urban households visited, 16.1 percent were found to contain more persons than rooms. This corresponds very closely to the percentage recorded for the 64 cities of the original Real Property Inventory, which was 16.8 percent.¹

All degrees of crowding are very much worse in the

¹ See ch. II, table 4.

South than in the other geographic sections. The West makes the best showing and the distinction between East and Central is slightly in favor of the East. As here used, the South includes South Atlantic and Gulf States. The West includes the West Coast States and Utah.

The following table taken from the report makes these relationships very clear:

TABLE 8.—PERCENTAGE OF HOUSEHOLDS SHOWING VARIOUS DEGREES OF CROWDING, BY GEOGRAPHIC AREA

Geographic area	Percentage of households with—		
	More than one person per room	More than one and one-half persons per room	Two or more persons per room
East.....	14.6	3.9	1.8
Central.....	15.4	5.5	3.6
West.....	10.2	3.5	2.3
South.....	24.9	12.1	8.8

Note that in the South it is the cities under 25,000 which make the worst showing in all degrees of crowding. The same tendency emerges, though less sharply, in the West. The first section of the table is given below:

TABLE 9.—PERCENTAGE OF HOUSEHOLDS SHOWING CROWDING (MORE THAN ONE PERSON PER ROOM), BY GEOGRAPHIC AREA AND SIZE OF CITY

Size of city	East	Central	West	South
500,000 and over.....	16.0	16.5	10.6	-----
100,000 to 500,000.....	14.3	14.5	9.8	23.1
25,000 to 100,000.....	9.4	13.1	8.1	25.6
Under 25,000.....	10.1	15.5	11.5	30.1

Quite naturally, in general, the prevalence of crowding varies inversely with income.

TABLE 10.—PERCENTAGE OF FAMILIES SHOWING VARIOUS DEGREES OF CROWDING, BY FAMILY INCOME AND RELIEF STATUS

Annual family income and relief status	More than one person per room	More than one and one-half persons per room	Two or more persons per room
All families.....	16.1	5.9	3.8
Relief families.....	34.2	16.0	10.2
Nonrelief families with incomes:			
Under \$1,000.....	17.0	7.1	5.0
\$1,000 to \$2,000.....	11.8	2.9	1.5
\$2,000 and over.....	7.7	1.4	.7

The figures serve to confirm the widespread belief that Negroes have especial difficulty in securing adequate housing. They suggest, however, that Mexicans, Indians, and Orientals in the West do not fare any better.

TABLE 11.—PERCENTAGE OF FAMILIES SHOWING VARIOUS DEGREES OF CROWDING, BY COLOR AND GEOGRAPHIC AREA

Geographic area and color	Percentage of families having—		
	More than one person per room	More than one and one-half persons per room	Two or more persons per room
South:			
White.....	19.8	8.3	5.8
Colored.....	37.1	21.2	16.0
East:			
White.....	14.3	3.7	1.7
Colored.....	20.8	8.0	4.7
Central:			
White.....	14.7	5.0	3.3
Colored.....	26.5	12.9	9.0
West:			
White.....	9.4	3.0	2.0
Colored.....	30.9	15.0	9.7

SANITARY FACILITIES

Thirteen percent of the urban households from which information was secured either had no indoor flush toilet or had to share one with other households. (Compare 13.5 percent in the original Real Property Inventory.) Of these, approximately half were for the exclusive use of one family, but were substandard in location or type. The shared ones were in part objectionable only because shared; in part, on all counts.

As in the case of room crowding, the South makes the worst showing and the West the best. More strikingly than in crowding, the small communities are the worst offenders in respect to sanitary facilities and the large cities have done best.

TABLE 12.—PERCENTAGE OF HOUSEHOLDS WHICH EITHER DO NOT HAVE PRIVATE INDOOR FLUSH TOILETS, OR SHARE THEM, BY GEOGRAPHIC AREA AND SIZE OF CITY

Size of city	Percentage of households			
	East	Central	West	South
500,000 and over.....	6.8	9.9	5.4	-----
100,000 to 500,000.....	5.3	11.9	9.5	22.1
25,000 to 100,000.....	11.5	16.9	8.3	27.3
Under 25,000.....	16.7	28.1	15.2	40.8

Further splitting up brings out that privies are characteristic of the smaller cities, while the sharing of an indoor flush toilet by two or more families is more frequent in large cities than in small ones.

Rural areas.

The rural areas selected include one example of good living conditions (Hillsdale County, Mich.) and others varying from fair to very bad. That

they should show a large percentage of outdoor privies was to be expected. The 16 rural counties of Georgia, however, include a still more backward category—no toilet facilities of any sort.

The Georgia counties also showed a high degree of crowding, 43.6 percent of households having more persons than rooms, 24.7 percent being in the overcrowded and 18 percent in the greatly overcrowded groups. This bears out earlier investigations by the Children's Bureau and others as to rural room congestion in certain localities.

CHAPTER VI

The Cost of Bad Housing in Preventable Sickness and Death

Spot maps and rate maps.

Many studies have been made in recent years of the relative frequency in the several sections of a community of death, reportable illness, juvenile delinquency, crime, fires, illegitimacy, and other phenomena of which city records are kept. This type of study has the advantage of requiring no field work, and the merit of portraying results to the eye very dramatically in spot maps and, for some purposes more accurately, in rate maps. Interpreted with proper caution, such studies are immensely valuable.

The study may be of all deaths, or of deaths of children under 1 year of age. It may relate to deaths from some special cause, as tuberculosis. It may be concerned with living cases reported, as of typhoid fever or venereal disease. Whatever the subject, the home address of each case is represented by a dot on the city map. The study is either for 1 calendar year, or, if greater accuracy is desired, or the number of cases is small, for 2, 3, or 5 years, from which an average may be obtained.

In general, spot maps show a striking concentration of such cases in slum areas.

The first caution to be observed is that slum areas are usually also congested areas. One reason why they have more deaths and illnesses is because they have more people per acre. To get around that

difficulty, we calculate rates in relation to census population. The general death rate of any area is the number of deaths occurring during the year per 1,000 of population in the area. An infant mortality rate is the number of deaths under 1 year of age per 1,000 live births.

Substitution of area rates for spots on the city map will usually modify the picture, but the death rates and some sickness rates in slum areas will still be very much higher than in good residential areas—often twice as high, sometimes more.

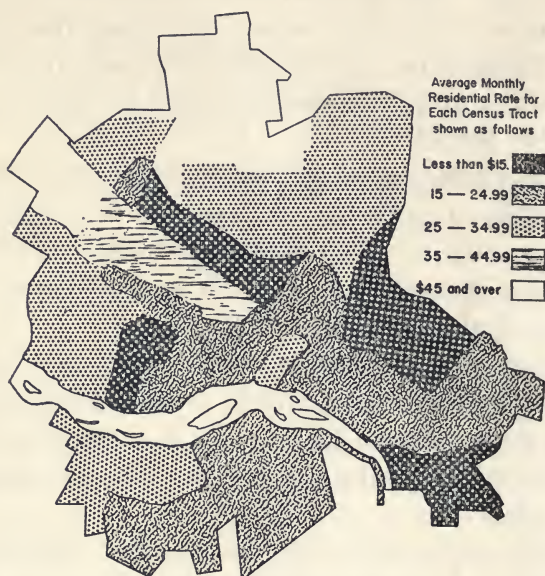
Respiratory diseases communicated by spray in coughing and sneezing, and in general all diseases resulting from contact infection will find more victims where room congestion, and above all bed congestion, is prevalent.

A point to be taken into account is relative racial immunity. Negroes and American Indians present low immunity to tuberculosis infection as compared with the white race, who have been subjected to it for a much longer time. (On the other hand, the Negro race has a high degree of immunity to the effects of hook-worm infection, an African affliction which is very damaging to whites.)

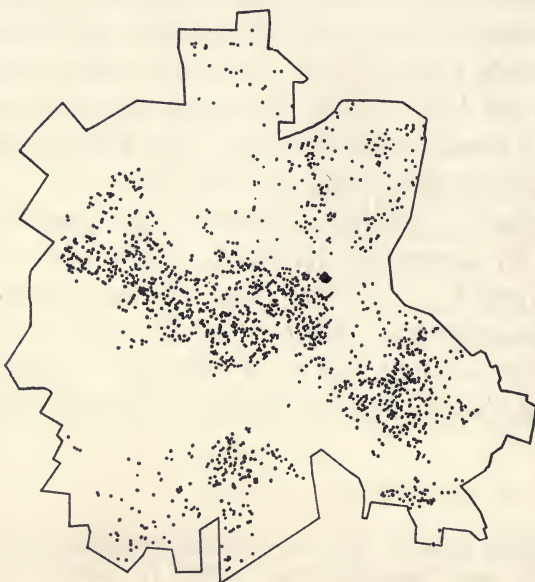
Diphtheria, though doubtless its spread is increased by congested living, is much more affected by the use of antitoxin. The relative thoroughness of immunization of children in one district as compared with another has more effect on the diphtheria rate than the quality of housing or the degree of room congestion.

Popular fallacy No. 9.—*That moving slum population into good housing immediately reduces sickness and death rates to a minimum figure.*

CHART V.—DISEASE AND DELINQUENCY CONCENTRATION IN
LOW-RENTAL AREAS, RICHMOND, VA.



V a.—Rental map, 1934



V b.—Tuberculosis cases active during 1934



V c.—Juvenile delinquency—convictions during 1934



V d.—Adult delinquency—convictions during 1933

FEDERAL WORKS AGENCY

RESEARCH AND STATISTICS DIVISION

UNITED STATES HOUSING AUTHORITY

RESEARCH SECTION AUGUST 1, 1939

Source: Richmond City Planning Commission, Statistical Data Relative to Housing, 1935.

Many factors are involved besides housing, such as poverty, ignorance, lack of medical care, and sometimes hereditary handicaps. All we know is that better environment helps. Improvement which can be measured statistically requires several years to develop fully. In the long run, the health of transplanted slum families does approach the city average. It is the children who show the most marked improvement soonest.

Cleveland.—Before the Real Property Inventory got under way Howard Whipple Green had spent years plotting and analyzing health data by census tracts for the Cleveland Health Council. He grouped the census tracts into 14 economic areas on the basis of rents and rent-equivalents derived from value of owned homes. In the lowest, rents averaged under \$15 per month, in the highest, over \$100. The two highest rent areas combined had a population just over 100,000 and a general death rate of 7.2. The two areas of lowest rent (under \$20) had a population of similar size and a death rate of 15—more than twice as high. The average for the city was 11. The infant mortality rate varied from 26 to 110 per 1,000 live births, in accordance with economic area, and as compared with 53.2 for the city.

Tuberculosis death rates Mr. Green first adjusted for age and sex, since the disease is not equally dangerous at all ages or for both sexes. Then he classified by race. Here we see the rate per 100,000 of white population dropping from 127 in the two lowest rental areas to 19 in the two highest. The rate per 100,000 of colored population is 550 in the two lowest economic areas and 221 in the highest having sufficient Negro population to tabulate. This is the seventh from the bottom, where the white rate is 45.

These figures show a much greater variability in tuberculosis death rates than in general death rates. The Negro death rate from tuberculosis is seen to be roughly four times as high in Cleveland as the white. But it also is seen to diminish along a fairly parallel line as rents rise.

Similar studies, though few so elaborate, have been made more recently in a large number of cities, among them Boston, New York, Philadelphia, Wilmington, Richmond, Birmingham, Chicago, Indianapolis, Detroit, Milwaukee.

Detroit.—A Detroit survey of the East Side slum area of 50 blocks, in which the PWA housing project, Brewster, has been located, showed a tuberculosis rate $6\frac{1}{2}$ times the city average and a pneumonia rate 8 times the average. It is a predominantly Negro area.

New York.—New York City figures show general and infant death rates highest and tuberculosis and venereal disease most prevalent in the sub-standard areas of Negro Harlem, with East Harlem and the lower East Side, and considerable sections of the middle East Side, Yorkville, the middle and lower West Side, and what remains of the tenement district south of Canal Street following. Altogether, in spite of its luxury housing and its considerable volume that is decidedly high grade, the Borough of Manhattan, with its masses of unredeemable old-law tenements, runs a general death rate about twice as high as the moderate income Boroughs of the Bronx and Queens. The latter, each with more than a million inhabitants, have been built up largely since 1920 and contain very little housing which antedates the tenement-house law of 1901. Their general death rates in recent years run between 7 and 8 per

1,000, and Manhattan's, about 14, with the city average between 11 and 12. Brooklyn and Staten Island furnish intermediate conditions and intermediate rates.

New Zealand and Holland.—The two nations with the lowest general and infant death rates in the world are New Zealand and Holland. One is old, densely populated, highly urbanized, and industrialized. The other is new, sparsely settled, and predominantly agricultural. Both have been outstanding in their attention to housing conditions since the turn of the century.

It is not suggested that housing is the only reason why their people are so much healthier than those of the United States. It is undoubtedly one reason.

TABLE 13.—AVERAGE ANNUAL DEATH RATE AND INFANT MORTALITY RATES: UNITED STATES, HOLLAND, AND NEW ZEALAND ¹

Country	General death rate per 1,000 population, 1933-36	Infant mortality rate per 1,000 births, 1934
United States.....	² 11.0	60.1
Holland.....	8.6	42.6
New Zealand.....	8.4	32.1

¹ Source: 1938 *Britannica Book of the Year*, pp. 203 and 339.

² 1930-34.

Letchworth and Welwyn.—These English Garden Cities are not residential suburbs pre-empted by the well-to-do, but busy industrial towns, planned for slumless, healthy living, containing an economic cross section of the British population. Letchworth dates from 1903 and Welwyn from 1920. The figures tell their own story.

TABLE 14.—DEATH RATES: AVERAGES FOR 5 YEARS ¹

Place	General death rate	Infant mortality
England and Wales.....	12.0	62.0
Letchworth.....	8.0	33.6
Welwyn.....	5.9	25.0

¹ Source: *Town and Country Planning*, March 1937.

Physical development of children.

Retardation in the physical development of slum children has frequently been observed. How much of it is due to housing conditions and how much to undernourishment or other causes is open to argument. But housing is certainly one factor. The question is further complicated in this country by differences in stature among the races making up our recent immigrant population. English studies have not had this difficulty to contend with. The following is typical.

TABLE 15.—COMPARISON OF HEIGHT AND WEIGHT OF CHILDREN IN BOURNVILLE AND SLUM AREA ¹

Area	Weight, in pounds				Height, in inches			
	Age				Age			
	6	8	10	12	6	8	10	12
	Boys				Boys			
Bournville.....	45.0	52.9	61.6	71.8	44.1	48.3	51.9	54.6
Floodgate St.....	39.0	47.8	56.1	63.2	41.9	46.2	49.6	52.3
	Girls				Girls			
Bournville.....	43.5	50.3	62.1	74.7	44.2	48.6	52.1	56.0
Floodgate St.....	39.4	45.6	53.9	65.7	41.7	44.8	48.1	53.1

¹ Source: The Bournville Village Trust, 1910.

Bournville, a precursor of the Garden Cities, was built at the end of the last century by George Cad-

bury, Quaker cocoa manufacturer and philanthropist, just outside of Birmingham, for his own workers and others. Living conditions are admirable. The Floodgate Street area in Birmingham was an insanitary working-class section.

Before-and-after statistics.

What evidence do we have that improving people's housing, without changing anything else in their circumstances, will make them healthier? Our American experience is still in the making. The volume of recorded experience from abroad is not particularly impressive. A number of countries which have carried out extensive subsidized public housing programs have not done any appreciable amount of slum clearance. Where it has occurred, the families moving into the new houses have not always been the ones displaced by the clearance. The only countries which habitually rehouse the families displaced are Great Britain and Holland. Even Great Britain started only recently, except in the case of Liverpool, which adopted the policy in 1897.


Holland has statistics on many subjects but not on this. Her women housing inspectors know well enough that in general the family health improves in better surroundings. Her teachers know the children are healthier and cleaner. But they write no dissertations about it.

Liverpool statistics are worn almost threadbare in this country (nobody bothers about them any more in England), but they are still interesting. Take two unhealthy areas which were picked by the health officer in 1902 for clearance, because they had a general death rate ranging from 40 to 60 per 1,000 and a tuberculosis death rate around 400 per 100,000.

The two areas had a population just over 10,000. In one of them, 79 percent and in the other 94 percent of the displaced families were rehoused. It was several years before the work was completed. During the 4-year period 1909-12, the health officer reported that the general death rate had fallen more than one-half, and the tuberculosis rate had dropped to 120.¹

There are a number of similar Liverpool statistics, covering a period of about 15 years. They did not take account of reduction in the general death rate and tuberculosis rate of the city during the interval, but otherwise they seem to be a pretty fair approach to that isolation of the housing factor which is so difficult to secure.

Dr. M'Gonigle's Study at Stockton-on-Tees.

 ***Popular fallacy No. 10.—That the most recent and scientific British investigations have proved that families left in slums are healthier than those moved to model housing estates.***

It is sometimes added that, in consequence, the British are abandoning further plans for slum clearance.

This is, of course, sheer nonsense. The British work in slum clearance continues at full speed. The kernel of fact under the pyramid of fiction was a very sensible little study made by the health officer of a coal-mining town in Durham with about 50,000 population—Stockton-on-Tees. In 1927 it was hit so hard by the depression in the coal extraction industry that the town council decided it could not afford to complete a slum clearance and rehousing scheme which it had under way. It was halted at the point

¹ Source: Local Government [Board of Great Britain, *42d Annual Report*, 1912-13.

where 152 families in the Housewife Lane Area on one side of Smithfield Street had been moved to a new cottage estate built for them on vacant land, Mount Pleasant, while 289 families on the other side of Smithfield Street were left in their slum homes.

This gave the health officer, Dr. M'Gonigle, the opportunity to use the families which had remained in the slum area as a control and to compare their vital statistics with those of the transplanted families during the next 5 years. As is the English practice where slum clearance is contemplated, statistics for the previous 5 years were already available.

TABLE 16.—GENERAL DEATH RATE PER 1,000 POPULATION:
5-YEAR AVERAGES 1923-27 AND 1928-32 ¹

District	Crude death rate	
	1923-27	1928-32
England and Wales.....	12.00	-----
Stockton-on-Tees.....	13.96	13.28
Riverside Area.....	22.16	20.45
Housewife Lane Area.....	18.75	-----
Mount Pleasant Estate.....	-----	26.71

¹ Source: G. C. M. M'Gonigle, M. D., and J. Kirby, *Poverty and Public Health*, 1936.

It would be very easy to shoot his statistics full of holes because of the absurdly small population involved. You cannot get valid statistics even by using a 5-year average even for the general death rate. But Dr. M'Gonigle splits up his handful of cases into all sorts of classes by age groups and causes of death, until they become a *reductio ad absurdum*.

If one regards the tables as case records rather than statistics, his study is valuable and sufficiently supports his conclusions, which are that if you force

families living at a bare subsistence level to double their outgo for rent, they necessarily reduce their expenditures for food, and malnutrition can easily damage them more than good housing can help them.

Ninety percent of the Mount Pleasant families had an unemployed head "on the dole." In their slum homes they had paid an average of 4 shillings 8 pence a week. At Mount Pleasant they had to pay an average of 9 shillings—almost twice as much as before. Studies of individual family budgets showed the effect on food purchases.

Dr. M'Gonigle says: "There appeared to be coming into being a tendency to stereotype practical hygiene on an environmental basis." He thought it time to bring nutrition into the picture, which is just what his study does. In the United States, the reverse situation exists. It may be permitted to hope that in both countries hereafter both subjects will be given the weight that belongs to them. Few will cavil at the conclusion that no family should be forced to secure good housing at the cost of going without adequate food.

CHAPTER VII

The Cost of Bad Housing in Juvenile Delinquency and Crime


SPOT AND RATE MAPS of juvenile delinquency and adult crime show patterns similar to death and disease maps, but with sharper contrasts. Ideological contact contagion seems to be more virulent than physical.

Roughly, it is typical to find a fourth of the delinquency cases in a city occurring among an eighth of the population who live on a sixteenth of the area. As these areas are of mixed usage, the relative congestion of the part used for residence is even greater. Where rate maps with smaller subdivisions are used, the spread is wider. Clifford R. Shaw, in his *Delinquency Areas, Series II*, "Alleged delinquent boys in Chicago dealt with by the probation officer in 1926," shows variations from 0 in certain outlying residential areas to 26.6 percent just south of the Loop.

Shaw's classic study, which appeared in 1929, remains the most important contribution in this field. He called it, "A study of the geographic distribution of school truants, juvenile delinquents, and adult offenders in Chicago," and plotted on maps of the city more than 60,000 home addresses, distributed in 10 series, extending over nearly 30 years.


Throughout the long period, whether a series dealt with adults or juveniles, male or female, the heaviest concentration of cases was in the downtown area of bad housing around the Loop, the next great-

est concentration being near the stockyards and steel mills. The housing story of these areas may be followed in a series of surveys by university students recorded in *The Tenements of Chicago, 1908 to 1935*, by Edith Abbott.

 **Popular fallacy No. 11.—***That the prevalence of crime and delinquency in certain districts is due to the inherently criminal tendencies of racial groups living there.*

Shaw's maps showing 30-year permanence of high delinquency rates in the same localities ought to dispose of this fallacy, because during that period the racial make-up of the population changed several times. At first it was predominantly Irish and German, then Polish, Jewish, and Italian. Last of all, Negroes from the South came in, and a few Mexicans. The last comers get the worst housing and show the highest crime and delinquency rates. As they move into better neighborhoods, they adopt better standards of behavior.

Maladjustment due to ignorance of language or customs accounts for some of the troubles of newcomers.

 **Popular fallacy No. 12.—***That substandard housing is the direct cause of delinquency and crime and that its elimination would result in a crimeless world.*

Probably no responsible person would defend that thesis, but elaborate studies have been undertaken to disprove it.

Shaw, who is not especially interested in housing, said in a paper on *Housing and Delinquency* at the President's Conference on Home Building and Home Ownership in 1931:

"The conclusion . . . is that delinquency is con-

centrated in the areas of bad housing and is associated with a complex of conditions, of which bad housing is only one. . . . A reduction in delinquency rates is most likely to result from a program which combines improvements in housing with modifications in other elements in the complex . . . at the least, *the development of improved housing in neighborhood units.*" [Italics ours.]

Neither steam heat nor a bathtub prevents delinquency.—Abraham Goldfeld, manager of Lavanburg Homes, New York, has made a statistical study of the 277 delinquency cases recorded in 1934 from 196 city blocks in East Harlem and of certain physical features of the delinquents' homes in comparison with the homes of the more than 31,000 nondelinquent children of the same age in the area. The population contained Italians, Jews, Negroes, Puerto Ricans, and others. There was the usual admixture of business and industry with tenement houses of varying age and degree of undesirability. Goldfeld concludes that "there is no relationship between bad housing in its physical aspects and juvenile delinquency as revealed by court records," but that "juvenile delinquency is correlated positively to some degree with social factors in housing." Regrettably, it was not found possible to tabulate room crowding.

Like the M'Gonigle study, Goldfeld's study is open to criticism as dealing with too few cases for statistical validity. By the time 217 boy and 60 girl delinquents are distributed among Goldfeld's four grades of tenements, with classifications for presence or absence of steam heat, bathtub, or private toilet, the numbers are not impressive. But as with the M'Gonigle study, there is no reason to question the validity of the conclusions.

A bad neighborhood counts for more than a bad house as a factor in delinquency.—Probably. But what do we mean by neighborhood? City planners and architects think of surrounding buildings and open spaces. Sociologists and psychologists mean available human society. Much muddled discussion has resulted from failure to distinguish between the two. Both are important. But a child is vastly more affected by the company he keeps than by bricks, mortar, or plumbing.

The slum is a social catch-all.—Human society in a slum area is extremely mixed. A majority of the adults are self-respecting, law-abiding workingmen and women in low-paid or irregular occupations, who want to bring their children up right and have them get on in the world. A smaller group has been pushed down from a higher income level by illness, accident, or incompetence. But in inescapably close physical proximity to the others, next door, upstairs, across the hall, are the still smaller minority that does the damage—the underworld of vice and crime and corrupt politics. Cleveland maps of homicides and of houses of prostitution follow the same pattern as tuberculosis and lowest rents. “Big shots,” formerly local boys, who come back to attend mysterious meetings in the room behind the saloon, are pointed out to admiring boys by older youths and possess the glamour of romantic adventure and material success. School and church, settlement house and parents present other ideals, and the majority of the children do not become criminals; but the casualty rate is high.

It does not pay to buck nature.

For a hundred million years, mammalian mothers, from opossum to man, have guarded their young until they could fend for themselves, teaching them by example and occasional castigation the techniques to follow and the dangers to avoid. As higher and higher types of animals appeared, the period of immaturity lengthened, presumably because there was survival value in longer protection and education. It remained for the urban tenement district to create a physical setting, indoors and out, where it is impossible for a present-day working-class mother to obey her age-old instinct to watch over her young. Children must play. If there is no room to play indoors, they must go outdoors. If there is no house yard, mere infants are forced into the street and out of their mother's sight. She may not be a particularly enlightened mother, but she is well intentioned. Her censorship of her child's playmates, could she exert it, would protect him from the grosser forms of moral contagion. As it is, he imitates what catches his attention, and bad behavior is more striking than good. The worst damage is done before he is old enough to go to school.

The proportion of delinquent girls is always much lower than of boys, whether because they are better guarded, more docile, or simply less enterprising. There is similar sex difference in adult crime.

Indirect influence of physical environment.

Most of the offenses which bring children before the juvenile court are not serious in themselves or in intent. They inconvenience their elders because of neighborhood congestion. Playing ball does not

get a boy into trouble in a suburban district. There is nothing sinful about tag. But if youngsters racing along the sidewalk knock fruit from the grocer's stand, he may call the policeman. If the idea takes root that merchant and policeman are natural enemies of childhood, an unfortunate attitude results.

Lack of repair encourages destructiveness. Few are the small boys who can resist the temptation to pick a little more plaster from a hole in the wall.

Roofs and fire escapes instead of trees for climbing, vacant lots full of rubbish, vacant premises easily broken into, supply adventure and hide-aways for secret meetings, perfectly normal in child life, but with unwholesome possibilities in the slums.

Overcrowding within the home, obtruding sights from uncurtained windows across narrow courts, obtruding sounds through thin partitions, thrust sex in its unloveliest aspects on the attention of young children. Dark halls and stairways, toilets without privacy, create hazards for young children as serious as the traffic hazards of the street.

The loss of hope.

So long as immigrants poured in and cities grew rapidly, there was movement of population out of the slums as well as into them, as the Chicago studies show. It was a cruel ordeal, lasting for years, through which newcomers must pass. Many fell by the way, but many, perhaps the majority, won through to something better. The atmosphere was one of hope. Now all that is changed. The last comers are caught in the slums and no natural current draws them out. The way is still open to the exceptionally gifted. But most people are not exceptionally gifted.

Unfortunately, in addition to the road of exceptional achievement, there is another much easier path to material comfort, a short cut glaringly visible in the worst slums—the way of the underworld.

A recent writer, Harry Manuel Shulman, in *Slums of New York*, 1938, based on case studies over a period of years, accuses the slum of being “not only a grimy mass of brick and mortar that can be torn down and demolished; it is also a way of living—a whole series of habits, attitudes and sentiments. . . . The slum is imprinted in the minds that occupy it, both adults and children. . . . The homes were usually physically clean, but barren and overcrowded. There was no privacy, no consequent possibility for any individual to have scope for his own activities and interests and no possibility of a systematic and organized family life. . . . The growth of a social class who are content with inferior housing, inferior living standards and inferior ethical control over the younger generation constitutes a menace to urban community life. The political enslavement of slum population by corrupt political machines and excessive contributions of slum areas to juvenile delinquency and crime, constitute social problems of the first magnitude.”

What Shulman calls “content” is the apathy that accompanies hopelessness. Like the stoical acceptance of an incurable disease, it vanishes if an available remedy is discovered.

“The Training of the Human Plant.”

A little book with that title appeared in 1907 by Luther Burbank, the California naturalist who developed new and better varieties of fruits, vegetables, and potatoes on his experimental farms. He felt



Slums were cleared to provide light, air, space, safe places for children to play in the center of a crowded city. A balcony for every family. A PWA Housing Division development, managed by the Cleveland Housing Authority under lease agreement with the USHA.



Dark and airless: Living room and bedroom in a Cincinnati slum cleared to give way to the Laurel Homes project.



Light, airy, sanitary community laundry in a PWA Housing Division development: Techwood Homes, managed by the Atlanta Housing Authority under lease agreement with the USHA.



Doing his best to help mother—who is doing *her* best to make a home in a Washington, D. C., alley dwelling.



Jane Addams Houses, Chicago. PWA Housing Division development managed by the Chicago Housing Authority under lease agreement with the USHA. Sprays furnish the safest kind of water play. Stone animals by WPA sculptors were designed for climbing.



Play space in a Brooklyn, N. Y. C., slum—fire escapes for trees.
Typical of large cities, North, East, South, and West.



Reading under the trees, Parklawn, Milwaukee, Wis., PWA Housing Division project managed by the USHA. Public park and playground, planned as part of the project, are maintained by the city.



Sidewalk loafing, Chicago, near Jane Addams Houses. Bodies and minds are dulled by this sort of "recreation." Compare this with the picture above.

that our melting pot had made us more "crossed" than any other nation in the history of the world, with enormous resulting possibilities both good and evil. When he crossed varieties of plants, that was only the beginning. Next came "selective environment."

"I give the plants upon which I am at work in a test, whether a single one or a hundred thousand, the best possible environment. So should it be with a child if you want to develop it in right ways. . . . Plants should be given sun and air and the blue sky; give them to your boys and girls. . . . All animal life is sensitive to environment, but of all living things the child is the most sensitive. Surroundings act upon it as the outside world acts upon the plate of the camera. . . . A child absorbs environment. . . . Where shall we begin? Just where we begin with the plant, at the very beginning. . . . In child rearing, environment is equally essential with heredity."

CHAPTER VIII

The Cost of Bad Housing In Excessive Taxes

IN ADDITION to the social costs of bad housing discussed in the last two chapters in terms of broken human lives, there are crushing economic losses to the individuals concerned. There are also serious economic losses to industry through irregular attendance due to preventable illness and through lowered general efficiency.¹ But there is in addition the more readily measurable economic cost of slums in dollars and cents to the taxpayers.

Indianapolis.

The earliest significant study dealing with the economic cost of slums to appear was made by R. Clyde White, director of the bureau of social research of Indiana University, in the summer of 1933. It dealt with slum census tracts of deteriorated housing near the center of Indianapolis, selected as probable areas of high economic drain.

Containing 10.4 percent of the population, they absorbed approximately 30 percent of city hospital service during the year 1932 and furnished 24 percent of cases at the venereal-disease clinic and 19.1 percent of patients at the hospital for the insane. The cost of extinguishing fires was 16.7 percent of the total for the city. Almost 25 percent of what it

¹ Reports by London manufacturers who have moved their plants to the Garden Cities, Letchworth and Welwyn, refer to the gain in per capita output and the great reduction in absences due to illness.

cost the city to arrest, try, and imprison misdemeanants, and 36 percent in the case of felons, was spent on residents of the district.

Within the district a small area with a population of 1,500 was selected for intensive study. An income and expense statement was drawn up. Assessed valuations for the area, multiplied by the tax rate, gave the theoretical income, from which was deducted the 32.55-percent tax delinquency to show actual income. The total cost of the area to Indianapolis taxpayers was \$92,775, its total contribution in taxes \$11,312.30, leaving a deficit of \$81,462.70. The average per capita cost of government in Indianapolis was \$38.56. Within the area, it was \$61.85.

Cleveland.

An Analysis of a Slum Area in Cleveland by the Rev. R. B. Navin and others, under the general supervision of Howard Whipple Green, appeared early in 1934. A deteriorated central area was chosen, containing 2.5 percent of the population occupying only three-fourths of 1 percent of the city area. Negroes and Italians were predominant.

Administrative expenses are assumed to be evenly distributed. Direct service is the sort that can be allocated to an address or an area, whether the service comes from city, county, or board of education. Anticipated income from all sources, without deduction for tax delinquency, was contrasted with expenditures.

The cost of direct services in the area to Cleveland taxpayers in 1932 was \$1,356,988, against which the taxes assessed (not all collected, by any means) were \$225,035, leaving a deficit of \$1,131,953. The per capita cost to the city of operating this slum area

was \$61.22, or a deficit above the revenue receivable from it of \$51.10 per capita.

Private welfare societies spent a large amount in this area. The fact, however, has no direct bearing on the subject of this chapter.

A number of other cities have since made similar studies, which corroborate the Cleveland and Indianapolis results in a general way, without any important new contribution either in method or fact.

Meanwhile, since all were based on selected areas of bad housing, the objection was raised that probably all residential districts run in the red, depending on business and industrial districts to make up their deficits.

Boston.

For this reason the city-wide study made in Boston in 1935 under the supervision of the city planning board, following a small-sample experimental study of the previous year, has been extremely useful.

The inquiry presented many difficulties. For all-city purposes, expenses and receipts had to be allocated by area on a per acre basis. For many purposes, including comparisons with other cities, calculations had to be per capita, but that method can only be applied to residential districts. Five groups of residential tracts were recognized as having common characteristics likely to be reflected in municipal balance sheets. Altogether, there were eight groups: (1) Predominantly business; (2) predominantly industrial; (3) high rent (or value) housing; (4) miscellaneous residential (apartment houses and high density); (5) suburban residential (detached houses with lawns and low density); (6) three-decker residential (largely frame construction, relatively high density,

and extensive blight); (7) low rental, or central slum districts; (8) unclassified districts and those where more than 70 percent of the area is tax exempt (water, parks, streets, institutions, and public buildings).

The Boston study was conducted in an extremely conservative spirit, so that the differences shown between its various types of residential area are consistently understated.²

Findings were that the downtown business districts and high-rent residential districts gave the city a handsome surplus of income over expenditure. Some industrial areas showed a surplus, while others showed a loss, the net result of all industrial areas being a small deficit. Miscellaneous housing had a small surplus, suburban housing a small deficit, three-decker housing a larger deficit, and low-rent housing much the largest deficit of all.

It would be unwarranted to assume that all properly conducted census tracts show a balance between taxes paid and services received, or that those in the red are *ipso facto* parasitic. It is perfectly normal for taxes from business districts to pay for schools in residential districts. Incomes are earned in business and industry for the express purpose of maintaining homes and families. Similarly, if there are more children in low-rent areas than in high-rent areas, it is logical for their schools to cost more per acre or per capita. Moderate excess cost in the suburban areas may be fully justified by the better health and social conditions secured. The situation becomes pathological when low-rent areas are shown to be more costly than others because of their high disease and delinquency rates, or because of frequent fires.

² A very brief discussion of the methods employed will be found in "The Costs of Bad Housing", Edith Elmer Wood, *Annals of the American Academy of Political and Social Science*, March 1937.

"About $7\frac{1}{2}$ percent of the net taxable area or 8 percent of the gross area of the city pays the deficit incurred by the balance of the area available for private use. In other words, the business area downtown and about 10 percent of the residential areas make up the loss from the industrial areas and the suburban, three-decker, and low-rental residential areas.

"The business area (2 percent of the total area of the city) pays 72 percent of the deficit and the high rental residential and the miscellaneous residential tracts pay the balance, 28 percent

"About $22\frac{1}{2}$ percent of the population live in the suburban areas, which cover 45 percent of the city's total acreage and are responsible for about 18 percent of the deficit. About 29 percent of the population live in the three-decker areas, which cover over 11 percent and are responsible for $41\frac{1}{2}$ percent of the deficit. About 9 percent of the population live in the low rental areas, which cover nearly 2 percent of the area and are responsible for over 21 percent of the deficit." ³

The Boston study establishes for Boston at the period of the survey (and it will probably hold true at other dates and for other cities) that some residential areas pay more taxes than they consume, but more do not. All residential areas combined, except the low-rent or definite slum area, show an average per capita deficit of \$10.81. The low-rent area has a per capita deficit of \$48.24. It would be conservative to interpret this as meaning that a deficit of \$10.81 is due to normal residential characteristics, while the difference between \$48.24 and \$10.81, or \$37.43, is due to abnormal or slum-induced characteristics.

³ *Report on the Income and Cost Survey of the City of Boston, 1935, City Planning Board.*

In the *Annals* article already cited, the surprising similarity of per capita deficits in slum sections of Indianapolis, Cleveland, and Boston was pointed out: \$51.10 in Cleveland; \$50.64 in Indianapolis (after crediting delinquent taxes to correspond with the others); \$48.24 in Boston (in spite of methods involving understatements).

Popular fallacy No. 13.—*That all the high tax expenditures in slum areas would automatically disappear on the demolition of the slum buildings and the rehousing of the population.*

Certain purely material wastes do stop with their causes. Excess fire alarms due to rickety stoves, unsafe chimneys, tinderbox roofs and stair halls, are an example. Excess cost of garbage and ash collection due to a multitude of unstandardized family receptacles cluttering the sidewalk is another.⁴

Health, crime, and delinquency rates improve gradually, but require several years, as many as five, to show a striking change. A man with an advanced case of tuberculosis, a child deformed by rickets, is not cured by moving into model housing. A youth, whose coterie supply themselves with spending money by selling lead pipes stolen from empty houses, does not become, all at once, a Horatio Alger hero.

As mentioned in chapter VI, such British reports as we have show that, over a period of years, transplanted slum populations approach the city average

⁴ A city official in New York kept tab for a month on the amount of refuse removed from Knickerbocker Village, two city blocks of apartments, equipped with incinerators, housing 4,338 people, and on collections from the same number of persons in adjacent old law tenements, with the following result: Residue from Knickerbocker Village, 46 cubic yards, or $4\frac{1}{2}$ loads; refuse from old law tenements, 537 cubic yards, or $53\frac{1}{2}$ loads. The volume was almost 12 times as great in the old tenements, and it must have taken considerably more time to collect each load from them.

in health and behavior. But it is idle to expect such changes to take place overnight.

It is also idle to expect the rehousing of slum populations, in and of itself, to abolish poverty or to end public expenditures for unemployment and relief—except to the extent that building new houses furnishes employment and that improvement of health and morale restores earning power.

Statistics are not a substitute for common sense.

CHAPTER IX

Housing Shortage in 1938 and Probable Needs to 1950 (Nonfarm)

WHATEVER SURPLUS of housing was produced by overbuilding during the 1920's and temporarily increased by the doubling up of unemployed families during the worst of the depression has long since disappeared through the combined effect of undoubling, increased number of families, and prolonged underbuilding.

Local variations are considerable, but the country as a whole is suffering from a housing shortage comparable to the one at the close of the World War. In many places the shortage is acute, especially at the lower rent levels, a fact which makes the demolition of unfit dwellings increasingly difficult. Cities which have been active in that line have had to call a halt except to the extent that they are able to secure subsidized public housing to take its place.

Farm houses, though badly enough needed, are excluded from consideration here because of the lack of building statistics in respect to them, because of the difficulty of considering them apart from other farm problems, and because their construction has never been a function of the building industry.

Economic factors of supply and effective demand, incomes, and construction costs, will be taken up in the next chapter. Here we deal only with present and anticipated needs.

It has become the entirely logical fashion to speak of quantitative and qualitative housing shortage.

But the terms sound "highbrow" to the average businessman. What is meant by the first is a numerical shortage caused by the excess of families over dwellings. What is meant by the second is the number of completely worn-out dwellings which ought to have been demolished and replaced sometime ago. It does not imply that they are going to be demolished immediately, or indeed at any particular time, only that they ought to be.

As will presently appear, we have an actual numerical shortage of over 1½ million dwelling units, which is likely to increase between now and 1950, at the rate of nearly 400,000 units per year, less any net increase which takes place.

On the ultraconservative assumption that only 10 percent of American nonfarm housing had outlived its usefulness in 1938, that would mean about 2½ million units ripe for junking. (The number of nonfarm dwellings in 1938 was estimated by subtracting the shortage of that date from the number of nonfarm families, as given in table 19.)

More than 300,000 other old houses will reach a similar condition each year.

Population changes.

Our population is again increasing by excess of immigration over emigration as well as by excess of births over deaths, though in both respects much more slowly than formerly, and at a progressively diminishing rate.

It is, however, not the population, but the number of families which determines the demand for dwellings. Because the number of persons per family is decreasing, the number of families is increasing at a higher rate than the population.

Predictions for the future are based on an assumption of the continuance of present trends, which may or may not prove to be justified.

TABLE 17.—ESTIMATED INCREASE IN NUMBER OF FAMILIES IN THE UNITED STATES¹

Year	Total	Farm	Nonfarm
1930.....	29,768,000	6,740,000	23,028,000
1935.....	31,827,000	7,360,000	24,467,000
1940.....	34,014,000	7,535,000	26,479,000
1945.....	36,592,000	² 7,684,000	² 28,908,000
1950.....	38,850,000	² 7,770,000	² 31,080,000

¹ Source: Estimates made by the Division of Economic Research, Bureau of Foreign and Domestic Commerce, U. S. Dept. of Commerce.

² Estimated by projecting the 1940 trend.

The estimated increase in the number of nonfarm families from 1930 to 1938 being 2,688,000 (see table 19), if no houses had been built and none destroyed during the interval, that figure would measure our 1938 dwelling needs to restore the 1930 degree of sufficiency. Since both construction and demolition have occurred, calculations are in order.

Residential construction.

TABLE 18.—VOLUME OF NONFARM RESIDENTIAL CONSTRUCTION, 1920-38¹

Year	Number of dwelling units	Year	Number of dwelling units
1920.....	300,000	1930.....	303,000
1921.....	432,000	1931.....	219,000
1922.....	676,000	1932.....	94,000
1923.....	814,000	1933.....	64,000
1924.....	827,000	1934.....	59,000
1925.....	894,000	1935.....	138,000
1926.....	841,000	1936.....	275,000
1927.....	757,000	1937.....	327,000
1928.....	713,000	1938.....	² 360,000
1929.....	510,000		
Total, 1920-29.....	6,764,000	Total, 1930-38.....	1,839,000
Yearly average, 1920-29.....	676,400	Yearly average, 1930-38.....	204,300

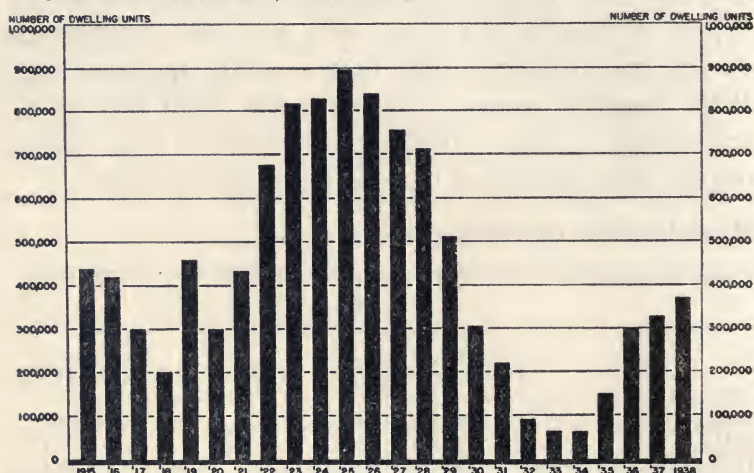
¹ Sources: *Construction Activity in the United States, 1915-37*, Lowell J. Chawner, p. 41; and *Construction Trends in the United States, 1937 and 1938*, Harold Wolkind, p. 3. Department of Commerce, 1938.

² Preliminary figure.

Besides giving us the number of new family units built to compare with the net increase of families, this table tells a dramatic story of a basic industry in boom and depression. The chart is clearer still, for it shows the high and low years of the previous cycle, 440,000 units built in 1915 and 200,000 in 1918.

Note carefully that the earlier crest of the wave was not nearly so high as in 1925, nor was the subsequent trough anywhere nearly so low nor so prolonged. There are reasons for that, and there are implications which we cannot afford to miss.

CHART VI.—ESTIMATED NUMBER OF NONFARM DWELLING UNITS CONSTRUCTED IN THE UNITED STATES, 1915-38



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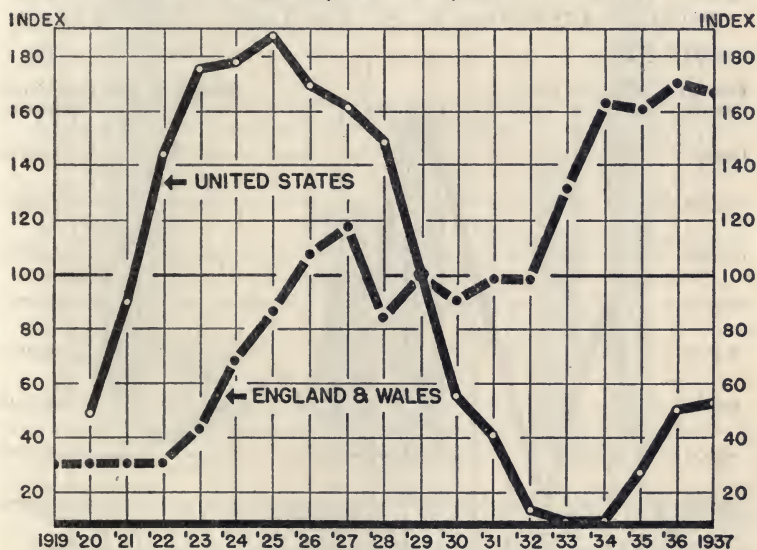
Sources: Construction Activity in the United States, 1915-37 and Construction Trends in the United States, 1937-38, U. S. Department of Commerce.

During the World War years, labor had been diverted into other activities than building houses, and at the end of the war, the increase in building costs introduced elements of uncertainty. Would

the new scale of prices last? Would people pay them? There was, therefore, hesitancy about building, in spite of the admitted shortage of a million dwelling units at the close of 1920, the pinch of rising rents, and the very real demand.

Thinking in terms of the industry, it is obvious that the army of skilled mechanics necessary for the production rate of the middle twenties must have exhausted all possible savings and become an army of destitute unemployed during the middle thirties, except as they abandoned their trade and found other occupation. Employment in the building trades has not reached the halfway mark even yet.

CHART VII.—INDEXES OF DWELLING UNITS BUILT, 1919-37: UNITED STATES COMPARED WITH ENGLAND AND WALES (1929=100)



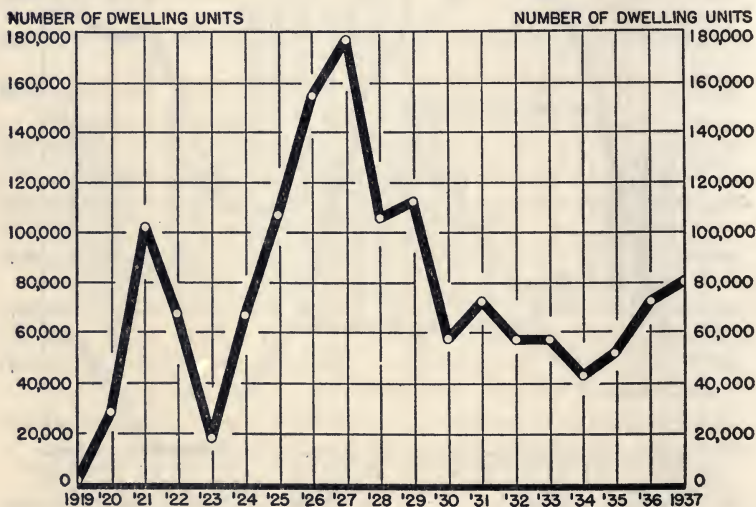
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Sources: Housing Policy in Europe, 1930, International Labor Office. Report of the British Ministry of Health, 1938; Serial No. R-694, Bureau of Labor Statistics.

It is obvious that human bodies are not so constituted that they can hibernate for a decade consuming their accumulated fat. The building industry, a basic one, needs to be rationalized or socialized or both until it operates with some degree of uniformity.

That building cycles do not necessarily follow similar patterns is shown by chart VII which compares the indexes of dwelling units constructed in England and Wales and in the United States from 1919 to 1937, the 1929 level being used as 100 in both cases. Both indexes were low at the close of the World War, that of the United States rose steeply in a run-away boom and fell with equal suddenness to a catastrophic low. That of England and Wales rose more gradually, ran fairly level for some years, then rose again

CHART VIII.—NUMBER OF DWELLINGS BUILT WITH PUBLIC ASSISTANCE IN ENGLAND AND WALES, 1919-37



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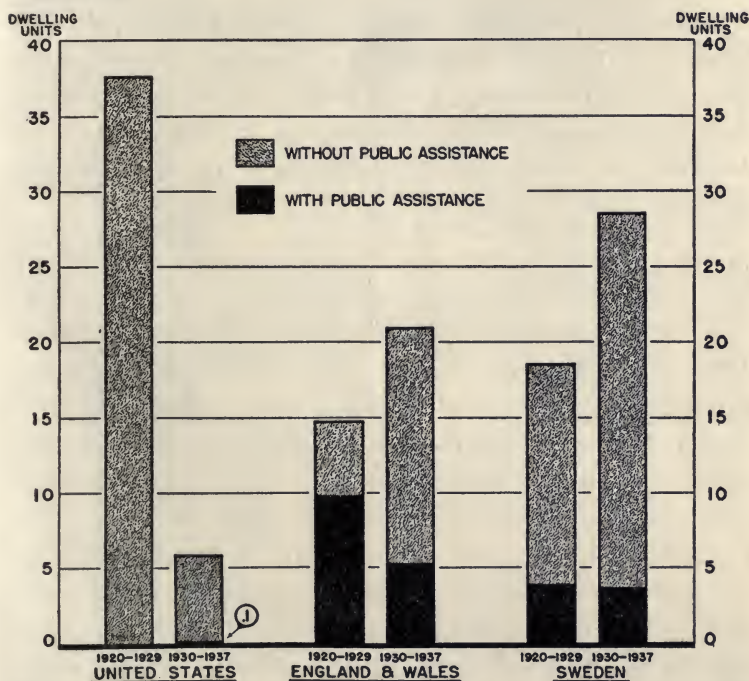
RESEARCH SECTION AUGUST 1, 1939

Sources: 1919-29, Housing Policy in Europe, 1930, International Labor Office; 1930-37, British Ministry of Health.

and is going along now on a level nearly as high as our peak, with no sign of collapse. Why?

One reason might be that they had large-scale public housing carrying most of the load when private enterprise was weakest and dropping to second place when private enterprise got its stride. (See chart VIII.)

CHART IX.—URBAN DWELLING UNITS CONSTRUCTED PER 100 FAMILIES IN UNITED STATES, ENGLAND AND WALES, AND SWEDEN, 1920-29 AND 1930-37



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Sources: United States—Statistics of Building Construction, 1920-37, U. S. Dept. of Labor, 1938. Families, U. S. Census, 1930.

England and Wales—Housing, British Ministry of Health, 1938, and unpublished data. Families, 1931 Census.

Sweden—Swedish Royal Social Board, Unpublished Data. Families, 1930 Census.

Another might be that private enterprise was wise enough to concentrate on the low-rent and low-priced sales market just above where the local authorities operate.

Still another point was that neither the price of materials nor other costs were permitted to rise freely. (See chapter XI.)

If these measures constitute partial socialization, the British building industry has found the result worth any unpalatable taste the medicine may have had.

Chart IX adds the Swedish record for comparison.

If you were giving advice to a boy on choosing a means of livelihood, could you conscientiously steer him toward anything with such a record of feast or famine as residential construction in the United States?

Conversions.

The conversion of a single-family house to use by two or more families, or the cutting up of large apartments into smaller ones may reflect the deterioration of a neighborhood or the changing demand due to smaller families, or both. Obviously it is practised only on older buildings.

In only a few cities have adequate records of conversions been kept, so that we must make our estimates from samples, which are not necessarily representative. The Bureau of Labor Statistics has unpublished data concerning 20 cities of varying size and location. The largest and smallest seem to have the highest conversion rates. Calculations made in the Division of Research and Statistics of the USHA arrive at 225,400 as the probable approximate number of additional family units created by



Stockholm: Cooperative apartments built on land rented from the city on a 60-year lease. Simply designed, pleasant, and modern.



Workers' cottages, for large families, Vreewijk, Rotterdam. Built by a limited-dividend society, financed by the Government.



Children's playground, municipal housing estate, Liverpool, England.

this process for nonfarm families during the period 1930-38. During the 1920's the number may have been somewhat larger.

Demolition and destruction.

Planned demolitions have been somewhat more regularly recorded by building departments than conversions. Dwelling units destroyed by fire, flood, or tornado have to be estimated from money losses listed by insurance underwriters. The Construction and Real Property Section of the Department of Commerce estimates them at an average of 30,000 units per year. The Bureau of Labor Statistics has published demolition permit data from 149 cities in Bulletin No. 650, *Statistics of Building Construction, 1920 to 1937*. It has also unpublished data for 24 smaller cities. A combination of their material with calculations for total nonfarm population permits an estimate which should be fairly reliable.

Nonfarm demolition, 1930-38 (building permit data) .	372,000
Nonfarm destruction due to fire, flood or tornado,	
1930-38	240,000
	<hr/>
Total	612,000

Rate of obsolescence.

We now have the elements for calculating numerical shortage. But what about the number of units which may be expected to wear out year by year, the so-called rate of obsolescence?

If only 1 percent of all dwellings wore out yearly, an average life of 100 years would be implied, which admittedly is too long. In 1931 the Bureau of Internal Revenue issued a report prepared at its request by the National Association of Real Estate Boards, which put the annual depreciation rate of

frame single-family dwellings at 3 percent and their average useful economic life at $33\frac{1}{3}$ years, with 2 percent and 50 years for brick or concrete construction. For two-family or multi-family houses, the depreciation rate was higher. This table was prepared for income tax purposes. There is no evidence that the National Association of Real Estate Boards has ever used it as a guide in establishing selling prices.

On the other hand, a figure of $1\frac{1}{2}$ percent for annual obsolescence would be considered conservative in business circles and is here adopted.

Tabulation of 725,526 dwellings by 5-year age groups and structural condition shows that obsolescence (i. e., being in need of major repairs or unfit

TABLE 19.—ESTIMATED NONFARM HOUSING NEEDS IN 1938, AND
ESTIMATED NEEDS 1938-50

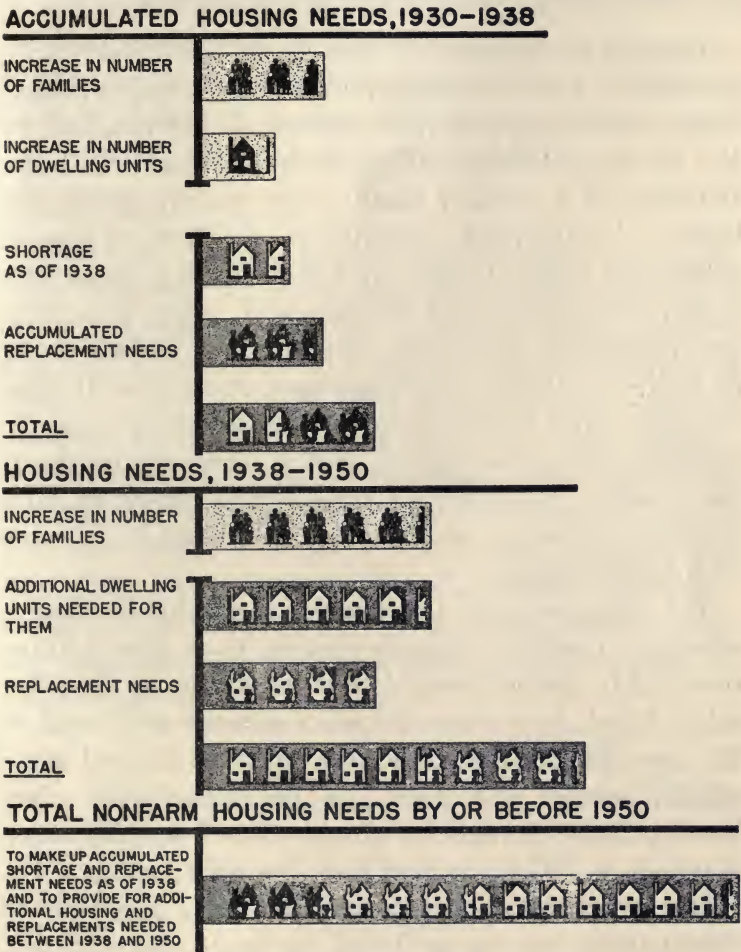
1. Census number of nonfarm families, 1930 ¹	23, 028, 000
2. Estimated number of nonfarm families, 1938 ¹	25, 716, 000
3. Increase in number of nonfarm families, 1930-38.....	2, 688, 000
4. Estimated number of new dwellings constructed, 1930-38....	1, 479, 000
5. Estimated increase in number of dwellings by conversion, 1930-38.....	225, 000
6. Increase in total supply of dwellings.....	1, 704, 000
7. Estimated number of dwellings demolished or otherwise de- stroyed, 1930-38.....	612, 000
8. Net increase in supply of dwellings, 1930-38.....	1, 092, 000
9. Accumulated shortage as of 1938 (item 3 minus item 8).....	1, 596, 000
10. Replacement needs as of 1938 (estimated at 10 percent of total dwellings).....	2, 412, 000
11. TOTAL, NEW NONFARM DWELLINGS NEEDED IN 1938....	4, 008, 000
12. Estimated number of nonfarm families, 1938 ¹	25, 716, 000
13. Estimated number of nonfarm families, 1950 ¹	31, 080, 000
14. Increase in number of nonfarm families, 1938-50.....	5, 364, 000
15. Replacement housing needed on the basis of $1\frac{1}{2}$ percent yearly.....	3, 907, 000
16. TOTAL, CURRENT NEEDS, 1938-50.....	9, 271, 000
17. Grand total (item 11 plus item 16).....	13, 279, 000

¹ Estimates made by the Division of Economic Research, Bureau of Foreign and Domestic Commerce, U. S. Dept. of Commerce.

for use) varies directly with age, as might have been anticipated. It will be recalled that this also showed in chart IV, giving the age and condition of dwellings surveyed at Des Moines, Iowa.

So, after subtracting that conservative 10 percent

CHART X.—ESTIMATED NONFARM HOUSING NEEDS
IN 1938 AND FROM 1938 TO 1950



EACH SYMBOL REPRESENTS 1,000,000

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of existing dwellings now ripe for demolition from the 1938 supply, we may reckon that about 325,000 others (1½ percent) will cease to render useful service annually, or 3,900,000 during the 12-year period.

Popular fallacy No. 14.—That “*substandard housing*,” “*insanitary housing*,” and “*housing needing to be demolished*” are interchangeable terms.

Insanitary housing is, indeed, by definition substandard. Overcrowding renders any housing insanitary, but the appropriate remedy is the removal of the too-large family to larger quarters and the substitution of a smaller family, not tearing down the house. Under urban conditions, the lack of sewer-connected inside toilets, and lack of city water are highly insanitary and substandard. Yet if a city has permitted otherwise unobjectionable houses to be built in outlying sections ahead of the installation of sewers and water mains, common sense suggests speeding such installation rather than demolishing the houses. Moreover, a considerable body of substandard housing can be made acceptable by repairs and modernization.

For these reasons and others, the volume of substandard housing is much greater than the volume reasonably recommended for demolition. On the other hand, any slum clearance scheme will involve the demolition of some houses which if located elsewhere, would not need to be demolished. No locality large enough for neighborhood development is made up 100 percent of housing unfit for use.

One is tempted at this point to make a couple of observations on the devotion to euphemisms of the real estate vocabulary. (1) “Obsolescent”—Memories of Latin verbs remind one that this word means

“becoming” or “beginning to be” obsolete. Yet the very worst class of building encountered in the real property inventories—the Philadelphia bandbox houses which collapsed and killed their inhabitants, the New York rear tenement which horrified churchgoers when transported to the nave of St. John the Divine—are only “obsolescent.” An obsolete house is still to be discovered. (2) Everything made by the hand of man, no matter how badly made, how completely worn out, how inappropriate to the location, or how defacing to the landscape, is politely and forever referred to as an “improvement.”

Vacancies.

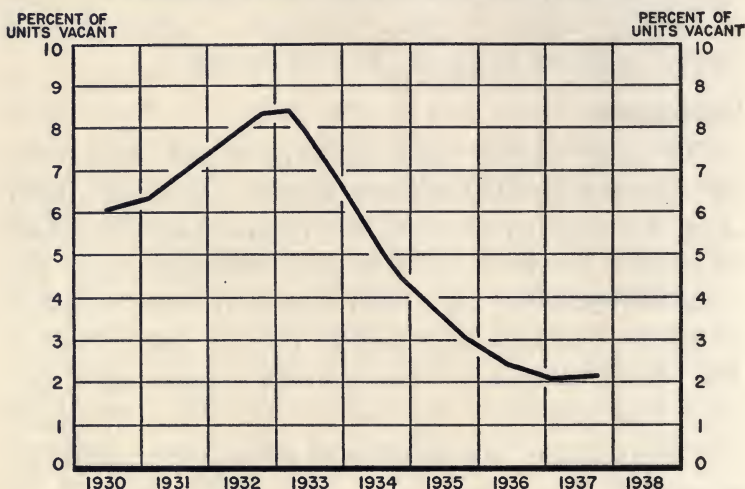
We have so far said nothing about vacancies. The Census of 1930 did not record them, nor did it show the number of extra or “doubled-up” families. Our 1938 needs were therefore calculated on the basis of restoring the 1930 status in that respect, which is generally regarded as not far from normal. The Real Property Inventories presented both vacancies and extra families for the dates at which they were made. From 20 to 34 cities, geographically scattered, have kept fairly comparable records of vacancies for some or all of the years 1930 to 1938. By combining them, the following median vacancy rates are obtained:

Year	Percent of residential units vacant	Year	Percent of residential units vacant.
1930.....	5.1	1935.....	3.1
1931.....	6.2	1936.....	2.1
1932.....	7.7	1937.....	2.0
1933.....	7.4	1938.....	2.6
1934.....	6.2		

Source: *Survey of Current Business*, August 1938, *Urban Residential Vacancies, 1930-38*. The figure for 1938 covers only the period January 1–April 1.

There are wide variations among the individual cities. But all had their high-vacancy points during the trough of the depression, where, as we know from the Real Property Inventory, it was balanced by the doubling up of unemployed families with relatives or friends. With returning jobs, the extra families sought separate quarters and vacancies fell—in many places, to the danger point.

CHART XI.—RESIDENTIAL VACANCY IN NONFARM AREAS IN THE UNITED STATES, 1930-37



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Source: Residential Building, Housing Monograph Series No. 1, 1939, by Lowell J. Chawner, National Resources Committee.

Something like 5-percent vacancy is necessary to give tenants freedom of choice, and anything below 3 percent is definitely a landlord's market. Houses unfit for use form a disproportionate part of all vacancies. Inconveniently located dwellings also figure largely in the list. And, of course, for a given family, a vacancy beyond its income capacity has no practical value.

To meet the housing needs indicated in table 19 and chart X would require an average annual building output of 1,107,000 dwelling units.

Of the total 13,279,000 units which will be needed by 1950, 6,960,000 (580,000 per year) would be additional housing for increased population, which has always been the field of private enterprise. The somewhat smaller replacement needs, 6,319,000 (527,000 per year), would be the utmost range within which public housing would operate. If even half of this need is met during the period, it will be a noteworthy achievement.

It should be clear that private enterprise will have at least as large a field as it ever had, and that the extensive no man's land between the two fields should stimulate the inventive genius of both camps.

CHAPTER X

The Housing Market

Supply and demand.

Under our present economic system, supply is supposed to flow in response to the stimulus of effective demand. Effective demand for an article is the desire for it, coupled with the ability to pay its market price. In the last chapter, we considered only needs, which are quite a different matter. And on the supply side we considered only dwelling units constructed, without reference to their cost.

The next step is to study contemporary income distribution and the selling or renting prices of the new housing to see how well they correspond.

A hundred new houses built do not meet the needs of 100 homeseekers if 80 of the houses are too expensive for 70 of the homeseekers. At most 50 families get what they need, while perhaps 25, attempting to pay more than they are able, go the foreclosure road to disaster, and 25 dwellings stand vacant for a long time, suggesting overbuilding, and are eventually disposed of at a loss. That is the sort of thing that happened during the 1920's, when there came to be an oversupply of houses which only the top economic third of the population could afford to live in. The slums got progressively slummier. No one tore them down. Families in the middle economic third wanted new housing, but went without—or tried to buy and lost their savings.

Foreclosures.

Home Loan Bank Board figures ¹ justify an estimate of 1,850,000 nonfarm residential foreclosures during the 13-year period 1926-38, inclusive. In that count, a two-family or multifamily house would only figure as one. We also know that approximately 1,000,000 additional homes would have been lost if the Home Owners' Loan Corporation had not been established to rescue them. What would have become of the lending institutions without that aid is a question which must some day be faced without blinking if we want to profit by the lesson.

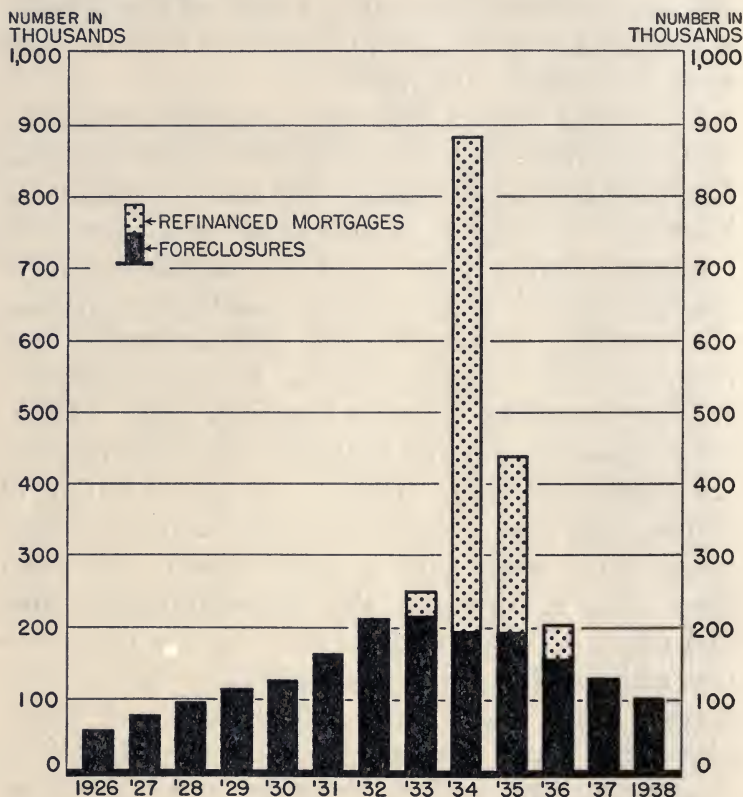
If we add up the estimated nonfarm residential units built from 1926-38, (table 18) we find they total 4,660,000 for the 13 years. We have no means of knowing the number of residential structures that represents, but in view of the substantial volume of construction of two-family and multifamily houses, the more than 2,860,000 actual and threatened foreclosures come unpleasantly close to balancing them. It is not a healthy situation from any angle. It has been disastrous for the industry and disastrous for the families affected. There is no way of telling, of course, how many of the foreclosed and threatened houses were newly built and how many were older ones. Nor is there any way of disentangling cause and effect. To what extent were the later foreclosures and near foreclosures brought about by the stock market crash and following depression and unemployment? And to what extent did the widespread disaster to home buyers, investors, and builders, already under way, help to precipitate the stock mar-

¹ Source: *Nonfarm Real Estate Foreclosures*, published monthly, Federal Home Loan Bank Board. From the total figures, 15 percent has been deducted as probably commercial foreclosures, in accordance with estimates of the Federal Home Loan Bank Board.

ket crash and the depression and to prolong its effects?

We can calculate the number of foreclosures from the beginning of 1926 to the stockmarket crash, but regrettably we have no national foreclosure figures earlier than 1926. Such local records as we have,

CHART XII.—NONFARM RESIDENTIAL FORECLOSURES¹ AND REFINANCED MORTGAGES² IN THE UNITED STATES, 1926-38



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¹ Estimated number.

² Loans made by Home Owners' Loan Corporation, June 12, 1933—June 12, 1936.

Source: Federal Home Loan Bank Board.

notably those preserved by the Philadelphia Housing Association, make it appear probable that the upward jump started several years earlier.

The record until the appearance of the Home Owners' Loan Corporation in the role of rescuer was one of undisturbed supply and demand and untrammelled private enterprise. The disaster would seem to have come from misjudging the market and misleading the home purchasers. The former was no doubt unintentional, and the latter may have been so to some extent. The better type of salesman believes what he says, which does not necessarily make it true. And of course not all salesmen are of that "better type."

The prosperity era.

American business during the 1920's believed in permanent prosperity. Its mood was one of uncritical optimism. The most fantastic ideas were held as to the standard of living of the American workingman and the distribution of income in the United States. The custom was to divide the national income by the population to arrive at the per capita income, as if this meant something (beside what would result from the highly unreal supposition of its being evenly divided). It was generally assumed that the average family contained five persons, which it did not. The per capita would then be multiplied by 5, and the result (\$3,750 at its highest) triumphantly claimed to be the income of the "average American family."

This was muddle-headedness. What they were averaging was incomes, not families. The big incomes at the top exerted all the influence. If, in a community of 100 households, 1 of them has an income of \$100,000 and 99 have incomes of \$1,000,

the average income in that place is \$1,990, but it does not help the standard of living of the 99 one particle.

What the man on the street really thinks of when he hears the loose term "average family" is probably the "median family" or the middle one. The median income is the one that counts in studying standard of living. Brookings Institution estimated the median family income in 1929 at \$1,700, and the estimate was probably somewhat high.

It was in 1926 that the New York World, to use its own words, "employed the Bureau of Business Research of New York University to make a city-wide, house-to-house study of the families reading New York's newspapers." As a result, it published a chart classifying the 1,317,794 families of New York by their annual expenditures as well as their newspaper preferences. The "high" group, spending over \$7,500 a year, contained 79,321 families, or 6 percent of the total. The "medium" group, spending from \$3,000 to \$7,500 a year, contained 807,266 families, or 61.3 percent of the total, while the "low" group, containing precisely 431,207 families, and spending less than \$3,000, constituted only 32.7 percent of the total. Happy city!

If you read the whole report carefully, you discover that instead of all the families in New York being visited, a 1-in-100 sample was used. If you study the questionnaire employed in the field work, you find nothing either about income or about expenditures. The present writer learned from a personal visit to the director of the Bureau of Business Research that he had assumed income to be five times rent and that neighborhood rents were inferred from some particular rent incidentally learned by the field worker. . . . And then people quoted this "scien-

tific" study to prove how prosperous the masses were in New York!

During the same period a favorite way to arrive at working-class income was to take hourly wage, multiply it by 8 and then by 365.

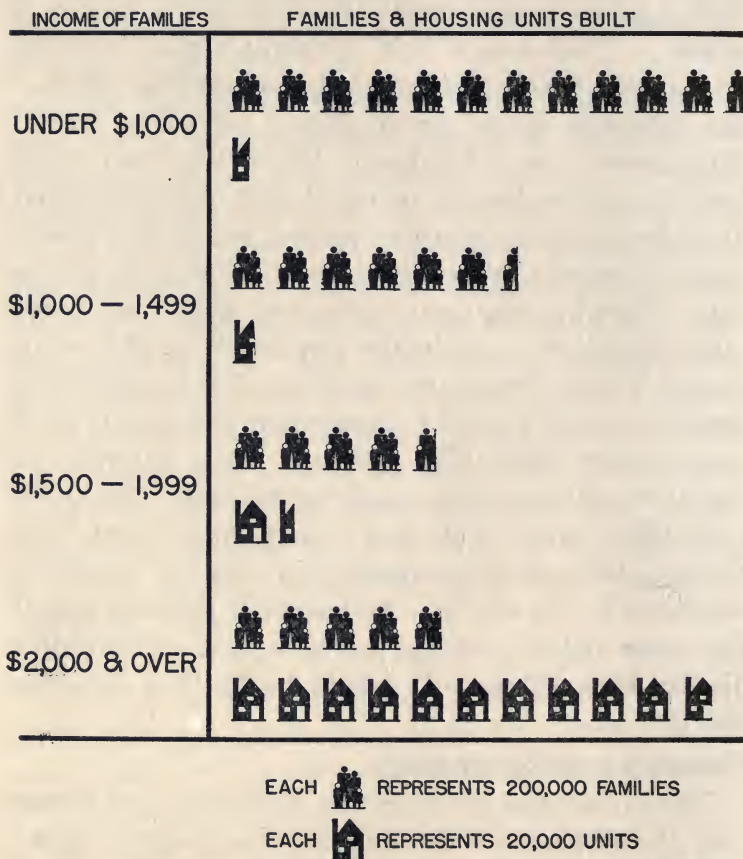
Along with this easy optimism as to other peoples' income came more easy optimism as to what a family with a given income could afford to pay in buying a house. "Two and a half"—"three times"—"three and a half times your income, economists tell us," the salesman would recite glibly, according to circumstances. And John and Mary, who had never bought a house before, believed that the agent must know because that was his business and he was a very pleasant person who drove them around in a new car. Carrying charges, compared with rent, were often described as only the payments on the mortgage. Taxes, insurance, repairs, or the special assessments which would come when the streets were paved were frequently ignored. Lost interest on the down payment was never mentioned. But John and Mary were told they could spend rent plus savings, because home ownership was the safest investment in the world. And what if sickness came? Or a new baby? Or the job was lost? One didn't discuss such things. It would be "selling America short."

Housing market studies.

The residential construction industry now knows that it overbuilt in the higher price ranges. Some of it knows that second mortgages were a racket. Much talk about quantity production and "automobilizing" the residential construction industry has done little to reduce costs. Practically all the new building is still for the top economic third of the population.

Chart XIII, "Residential Construction for Families in the United States", illustrates this point. The completely inverse relation of supply to need is graphically shown. Since all families must have

CHART XIII.—RESIDENTIAL CONSTRUCTION FOR FAMILIES IN THE UNITED STATES, BY INCOME GROUPS (Data cover 28 cities)



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Sources: Family Income Distribution—Derived from Health Survey, 1935-36, U. S. Public Health Service, Sample Coverage.

Housing Units Built—Derived from Building Permit Survey, 1929-35, Bureau of Labor Statistics.

shelter, an ideal market system would produce it at various prices in proportion to the number of families whose incomes correspond to such prices. But the picture shows at one end over 80 percent of the new units built are of a price which only 18 percent of the families could pay.

Ratio of income to cost of home.

The cost-income relationship is based on an assumption that a family can, on an average, afford to live in a house costing twice its annual income. No such relationship can, of course, be universally valid. But in the interest of the small-income family no larger ratio should be substituted. The Federal Home Loan Bank Board uses $2\frac{1}{2}$ times income. (The 3 and $3\frac{1}{2}$ times so often used by salesmen during the 1920's, never had any responsible authority behind them.) As a maximum beyond which mortgage lenders should not make a loan, the Federal Home Loan Bank figure is authoritative. But it should not be quoted to prove that any family can safely purchase a house costing $2\frac{1}{2}$ times its annual income.

Back in 1923, when Herbert Hoover was Secretary of Commerce, an admirable little handbook for prospective home owners, *How To Own Your Own Home*, was prepared by John M. Gries and James S. Taylor and issued by the Division of Building and Housing of the Bureau of Standards. Its advice is still good.

"The following table recognizes the fact that families having the same annual income may not be able to devote the same amount to the purchase of a home. For example, a family of two without dependents, situated in a village where living costs are low, can pay out more annually for a home than can

a family with children and other dependents living in a large city. . . . No rule can be set up that will apply in all cases. It is assumed, however, in this table, that the value of the house and lot will lie between $1\frac{1}{3}$ and $2\frac{1}{2}$ times one's annual income, *the ordinary proportion being around 2 times.*" [Italics ours.] Family budget experts would be in accord with this.

Building permits.

Users of building permit statistics should bear in mind that these represent the builder's advance estimate of construction costs. Land and its improvements are not included, nor is the anticipated profit. To arrive at an estimate of the cost to the purchaser, it has therefore become customary to add 50 percent to permit value, which various studies have indicated to be close to the actual average.

Building permit statistics published by the Bureau of Labor Statistics¹ show some effort to meet market demand since 1929—but not even remotely enough. Thus, in 257 identical cities, average building permit cost per dwelling unit dropped about \$550 during the period 1929–37 (\$4,565 to \$4,006, and probable selling price to the consumer \$6,850 to \$6,000).

On the other hand, although the average reduction in unit cost exceeds the drop in construction cost shown by the index of wholesale prices of building materials and hourly building-trades wage rates, it is by no means so great as the reduction in family purchasing power during the same interval. The most one can say is that it suggests some consciousness on the part of builders that they would do well to keep prices on the moderate side. By way of

¹ Bureau of Labor Statistics, *Statistics of Building Construction*, 1920 to 1937. Bul. 650, 1938, tables A2 and A6.

being magnanimous, attention is not being drawn here as sharply as it might be to their ill-starred lapse into price boosting during 1937 and the resulting temporary collapse in house building, closely followed by the painful set-back in general recovery known as the regression, out of which we are still slowly climbing.

It is worthy of note that residential building on the Pacific coast has a better record than in any other part of the country in the post-depression years, both in quantity and in moderate price in relation to the market.

Income distribution in 1935-36.

The report on *Consumer Incomes in the United States* for the year 1935-36, issued by the National Resources Committee in August 1938, gives much valuable information not otherwise available. A condensation of its basic table on family income distribution will be found in the next chapter. For immediate reference chart XIV is reproduced on page 94.

The median income of all families in the United States in 1935-36 is given as \$1,160. That of the families who received any form of relief at any time during the year was \$685 and that of nonrelief families \$1,285.

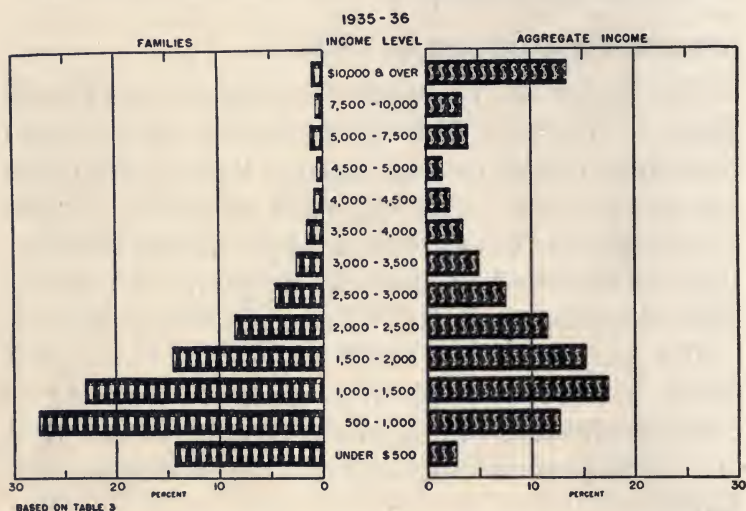
TABLE 20.—MEDIAN INCOME PER FAMILY ¹

Geographic region	All families	Nonrelief families
New England.....	\$1, 230	\$1, 365
North Central.....	1, 260	1, 410
South.....	905	985
Mountain and Plains.....	1, 040	1, 220
Pacific.....	1, 335	1, 485

¹ Source: *Consumer Incomes in the United States*, National Resources Committee, 1938.

In view of what has already been said of the value of median income figures in studying standard of living, it will be understood why it is chosen here to demonstrate differences connected with geographic region and with size of community. The median income figure has great social-economic importance, as well, because the whole middle economic third of the population are clustered so closely above and below it.

CHART XIV.—DISTRIBUTION OF FAMILY INCOME IN THE UNITED STATES, BY INCOME LEVEL, 1935-36



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Source: Consumer Incomes in the United States, 1938, National Resources Committee.

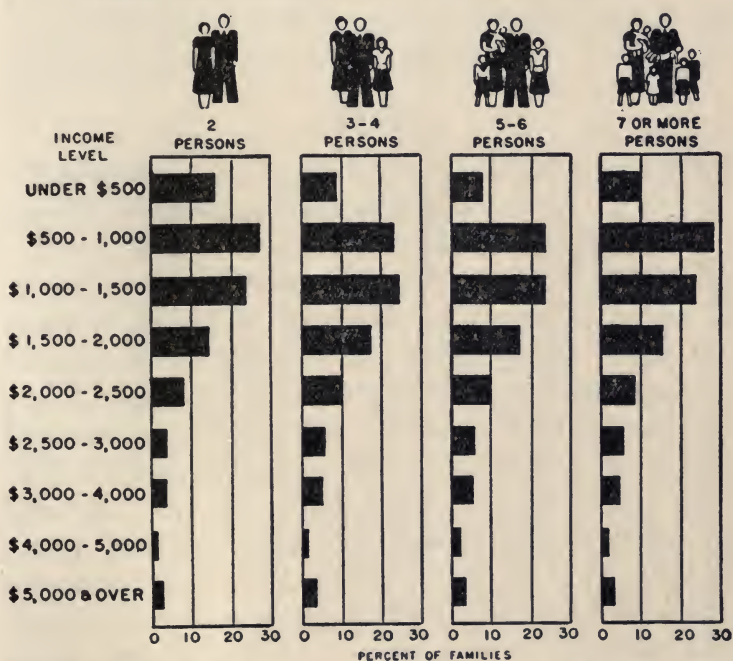
Finally we will reproduce an informative chart (p. 95), which shows how little tendency there is for income to increase in proportion to size of family. The lower percentage of large families with incomes under \$500 is undoubtedly because at that income level the large families are forced onto relief.

TABLE 21.—MEDIAN INCOME OF NONRELIEF FAMILIES, BY TYPE OF COMMUNITY¹

Type of community	Median income
Metropolises (1,500,000 population and over).....	\$1, 730
Large cities (100,000 to 1,500,000 population).....	1, 560
Middle-sized cities (25,000 to 100,000 population).....	1, 360
Small cities (2,500 to 25,000 population).....	1, 290
All urban communities.....	1, 475
Rural nonfarm communities.....	1, 210
Farms.....	965
All rural communities.....	1, 070
All communities.....	1, 285

¹ Source: Derived from *Consumer Incomes in the United States*, National Resources Committee, 1938.

CHART XV.—INCOME DISTRIBUTIONS OF NONRELIEF FAMILIES OF FOUR SIZES, 1935-36



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Source: *Consumer Incomes in the United States*, 1938, National Resources Committee.

The standard of living is as much a function of the size of family as of the dollar income. A little figuring will show that, in a city, at least, the standard attainable for a 7-person family with \$2,000 is no higher than that which a two-person family may achieve at \$1,000. Similarly a \$1,500 income for seven spells poverty as much as \$750 for two. And the children must be very young for it to be no worse. One has to translate them into "equivalent adult males" to reach so favorable a showing.

CHAPTER XI

Effect of Future Changes in Construction Costs, Income Distribution, and Cost of Living

WITH A GLANCE AT COST OF LAND, FINANCING, AND TAXES

THE HOUSING PROBLEM never stands still. The extent and difficulty of the job to be done depends upon the interaction of a number of variables, among which construction cost, income distribution, and the cost of living are outstanding.

Cost of land, interest and amortization rates, and taxes are other fundamental factors.

LAND

Excessive land costs make low-rent housing impossible without excessive subsidy.

Fine. But in either case, what is "excessive"?

Where speculative values have been placed on land, it should be shunned for purposes of public housing until deflation has taken place. If it has really high value for other purposes, it should be used for those other purposes. All would agree that land at \$15 a square foot is out of the picture for public housing. On the other hand, a fixed policy that public housing authorities should always build on peripheral land at 10 cents a square foot and never on close-in sites at a dollar might actually lead in a particular case to increased costs both to taxpayers and to tenants—aside from the fact that it would mean

missing the chance to clean up a slum. The public housing authority should be free to vary its policy according to circumstances, and the public should learn to follow the game intelligently. The authority will be abused by those with selfish interests whatever it does. So it may as well cultivate equanimity.

Since there is a tendency to exaggerate the effect of land costs on rent, it may help to keep in mind the rule of thumb that a normal ratio for raw land is about one-tenth and for improved land (with paved streets, utilities, and landscaping) about one-fifth of the total capital cost of a family dwelling unit.

INTEREST, AMORTIZATION, AND MORTGAGE STRUCTURE

If housing is to be financed by mortgage loans, the impossibility of low rentals without low interest rates must be by now pretty well understood. Debt charges come directly out of rents.

Interest rates vary at different periods and places. But the rate at which a solvent government can borrow from its people is always lower than commercial lending rates. Passing on this low interest rate is, therefore, one of the simplest and soundest ways in which a government may aid the housing of low-income families. Naturally, when the policy is new, savings banks, insurance companies, building and loan societies and other lenders view it with suspicion as unfair competition in their field, just as public housing is eyed askance by landlords. In both cases its fairness depends on limiting beneficiaries to low-income groups whom private enterprise does not serve.

A reasonably long period for amortization of the mortgage is as important to low rent as is interest

rate. In the case of an individual purchasing a house, an upper limit is put on the amortization period by the probable number of earning years ahead of him. In the case of a large-scale corporately owned development, it is the useful life of the houses which sets the limit, though the law of diminishing returns may make it advisable to have the period end sooner.

Few apologists are found today for the system of junior financing practised before the depression or for the system of short-term mortgages without amortization, which had to be renewed every few years. The Federal Home Loan Bank system has worked quietly but effectively to extend, safeguard, and unify the building-and-loan societies' plan of a single mortgage with regular payments to extinguish the loan. The Federal Housing Administration, in a different field, has used its mortgage insurance to rule out second mortgages and keep the rate of interest moderate.

TAXATION

This is another complicated and controversial subject which touches housing at several points. Nobody loves taxes, but it is generally conceded that they are a necessary part of civilized life. National, State and local governments perform their respective services, for which we all pay Federal, State and local taxes, direct or indirect. The real property tax on land and buildings is the mainstay of local government. It pays for schools, courts, police, fire protection, public health protection, streets, parks, libraries and other services which we could not do without and have no intention of doing without. No workable substitute has ever been devised for it.

There is general agreement that our methods of

assessment lack uniformity and scientific basis. But many criticisms strike deeper. We base our real estate tax on an estimate of the capital value of a property (assessed valuation). The British base theirs on its rental value, which is much easier to ascertain and seems more logical if one regards the ownership of real estate as an investment rather than a speculation.

Another frequent criticism is that our equal tax rate on land and buildings tends to discourage investment in new buildings or improvement of those we have.

The differential tax is the remedy usually proposed, Pittsburgh being given as the chief example. There the tax rate on land is twice as high as that on buildings. This is claimed to discourage holding land idle and to reduce the taxes of the small home owner. The disadvantage is that it stimulates over-intensive use of land. There is a proposal before the City Council of New York to make taxes on land nine times as high as on buildings. It is not likely to be adopted.

Popular fallacy No. 15.—*That since British public housing pays full local taxes, ours could and should do the same.*

As indicated, what British public housing pays is a percentage of the low subsidized rent, not of the capital value. To make the procedure comparable, our public housing projects should pay service charges equal to the taxes received from the houses previously occupied by the tenants. But then our city fathers would also have to follow the British example of voting hard cash in the city budget to pay the local share of subsidy. The method has its advantages, but are our cities ready for it?



Philadelphia, Hill Creek, PWA Housing Division project managed by the Philadelphia Housing Authority under lease agreement with the USHA. The project was planned so that the fine old trees on the site could be preserved.



Play area in Williamsburg Homes, PWA Housing Division project, managed by the New York City Housing Authority under lease agreement with the USHA.



Dining room in a Detroit slum—the home of a family which later moved into a Parkside home. (See opposite page.) The dark kitchen in the rear is a rough lean-to built onto the house.



The privy for the same family as shown above was in a corner of the barn behind the house. The only running water in the house was one cold-water faucet in the kitchen.



The same Detroit family after moving into Parkside Homes, PWA Housing Division project, managed by the Detroit Housing Commission under lease agreement with the USHA. Modern kitchen conveniences simplify the housewife's work, improve health conditions.



Same child as on opposite page enjoying modern bathing facilities of Parkside.



Brentwood Park, Jacksonville, Fla., USHA-aided project opened in July 1939; 230 former slum families now occupy these modern, airy homes.

CONSTRUCTION COSTS ¹

Construction costs and income distribution are likely to undergo substantial changes in the next few years, and cost of living may. Construction costs may either increase or decrease. If the home-building industry is ever put on a mass production basis and the unit cost of homes is reduced in relation to the then-prevailing income distribution, by so much will the market for profitable private enterprise be widened and the task facing public housing simplified.

We hear a great deal about mass production, prefabricated houses, packaged houses and new building materials. Not much has resulted, but it would be a rash person who would assert that nothing ever will. Chickens should not be counted before they are hatched, and some hens are pretty dumb. Still, persistent setting on a nest of eggs raises a presumption that *some* chicks will eventually emerge.

One reason why progress has been slow is that the groups concerned other than labor—real estate, builders, makers and distributors of building materials, lending institutions—have not yet given up hope of passing the buck to labor. They are beautifully unanimous on the iniquity of high hourly wages in the building trades. “If labor would exchange its high hourly rates for a guaranteed annual income”—And who would furnish the guaranty? That question has not been answered yet.

Popular fallacy No. 16.—That it is economically unsound for a workingman to live in a house built by workers receiving higher wages than he gets himself.

¹ Much pertinent material bearing on the subject matter of this section will be found in testimony before the Temporary National Economic Committee, especially in that of Assistant Attorney General Thurman W. Arnold on July 7, 1939, and in the summary by Dr. Krebs on July 14.

So? And I suppose no one should have his appendix removed by a surgeon whose income is larger than his own?

Instead of decreasing, construction costs may increase. Indeed, the tendency for them to do so when and if a building boom develops is almost irresistible. In the early part of 1937, when recovery seemed to be well under way and home building started out briskly, up went construction costs, especially materials, and down fell the boomlet, carrying with it the delicate new fabrics of recovery. Did those concerned learn the lesson?

The British Government had the right idea in 1924 when it secured a simultaneous "gentlemen's agreement" from the building trades, the contractors, and the makers and distributors of building materials not to raise prices (with certain safeguards) during its 15-year program of building 2½ million houses for workingmen. The Government was willing to pledge taxes for subsidies if they would produce low rents, but not if the low rents were liable to be wiped out by rising costs. The Government's part in the agreement was in assuring volume and continuity of work. In proportion to population, it was as though our United States Housing Act provided for 7,500,000 dwelling units instead of a scant 160,000.

The Belgians had a good idea when their national housing authority set up an office to standardize and pool the orders for building materials which their local housing authorities were going to need, in order to obtain reductions in cost based on quantity orders.

After the World War, many European government-subsidized housing projects saved on materials cost and transportation by making their own bricks or cinder blocks on the site.

At various times Vienna and Bergen and Stockholm have permitted impecunious families to contribute their own labor in lieu of cash toward the building of small suburban homes. That does not seem very different in essence from the way our American pioneers acquired theirs.

INCOME DISTRIBUTION

During the 1920's, the American man in the street was unreasonably optimistic about the national income and its distribution. During the 1930's the pendulum has swung just as far in the other direction, and unreasoning gloom prevails.

National estimates of the distribution of family incomes were made for 1929, 1933, and 1935-36. There have been no later ones.

All three studies are worthy of respectful consideration. They are in a wholly different category from the newspaper-business-school survey cited in the last chapter. But no national family income study anywhere at any time has done more than afford a basis for intelligent estimating. Collection in the field of accurate figures presents peculiar difficulties. Wage earners seldom know what their annual family income has been. Business and professional men seldom tell. Persons on known fixed salaries without other resources present the only easy group.

It is not intended here to minimize either our urgent need for income distribution information, or the value of the better studies made. This is merely a caution not to impute to them the degree of accuracy obtainable by the census in enumerating population or by a health department in recording the year's births and deaths.

Moreover, even if the 1935-36 figures had been 100 percent accurate, which we know they were not,

they would not be true for 1938-39 because of changes which have taken place, and the net effect of all changes would be a more favorable picture.

TABLE 22.—DISTRIBUTION OF FAMILIES BY INCOME LEVEL, 1935-36¹

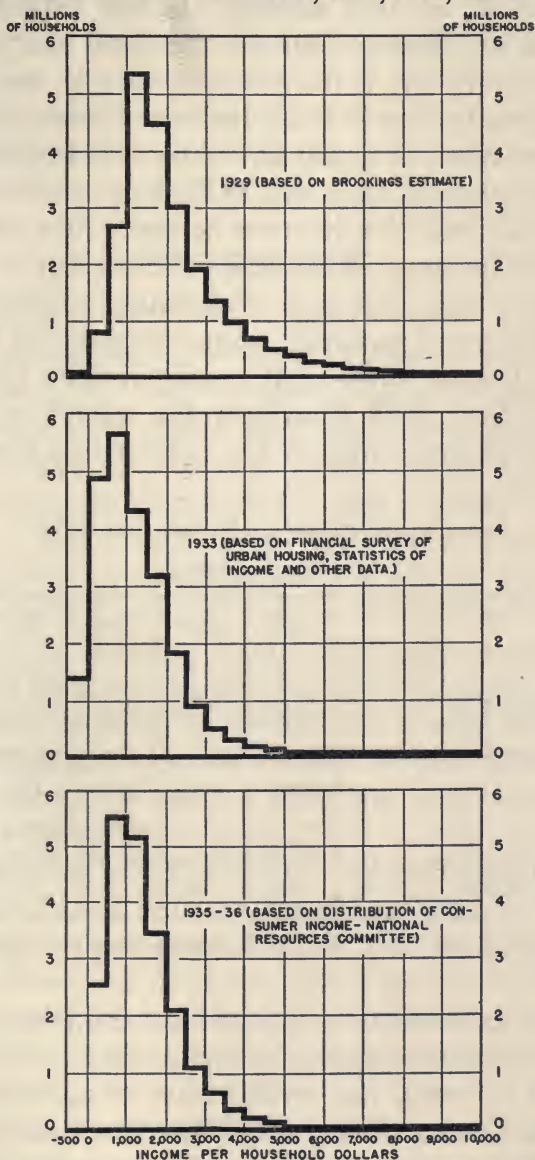
Income level	Families		
	Number	Percent at each level	Cumulative percent
Under \$500.....	4, 178, 284	14. 21	14. 21
\$500- \$750.....	3, 799, 215	12. 92	27. 13
\$750- \$1, 000.....	4, 277, 048	14. 55	41. 68
\$1, 000-\$1, 250.....	3, 882, 444	13. 20	54. 88
\$1, 250-\$1, 500.....	2, 865, 472	9. 75	64. 63
\$1, 500-\$2, 000.....	4, 240, 395	14. 42	79. 05
\$2, 000-\$2, 500.....	2, 464, 860	8. 38	87. 43
\$2, 500-\$3, 000.....	1, 314, 199	4. 47	91. 90
\$3, 000-\$4, 000.....	1, 181, 987	4. 02	95. 92
\$4, 000-\$5, 000.....	402, 595	1. 37	97. 29
\$5, 000-\$10, 000.....	510, 010	1. 74	99. 03
\$10, 000 and over.....	283, 791	. 97	100. 00
All levels.....	29, 400, 300	100. 00	-----

¹ Condensed from table 3, page 18, *Consumer Incomes in the United States*, National Resources Committee, August 1938.

Table 22 includes farm families and excludes one-person families and is, so far, on its face, comparable with the 1929 table shown in the first chapter. It is not wholly comparable, because the Brookings estimates include in family income the total earnings of any lodger or boarder related to the head of the household by blood or marriage in any way, while the National Resources Committee study very properly excludes even the earnings of adult sons and daughters who live at home and pay board.

The real situation in 1929 was, therefore, not quite so good in the lower brackets as it appears and the difference in economic well-being between that date and 1935-36 is less than a direct comparison of the two would suggest.

CHART XVI.—DISTRIBUTION OF NONFARM HOUSEHOLDS BY INCOME CLASSES, 1929, 1933, AND 1935-36



FEDERAL WORKS AGENCY RESEARCH AND STATISTICS DIVISION
UNITED STATES HOUSING AUTHORITY RESEARCH SECTION AUGUST 1, 1939

Source: Residential Building, Housing Monograph Series No. 1, 1939, by Lowell J. Chawner, National Resources Committee.

For changes since 1935-36, we must have recourse to national income figures. If we assume that national income paid out for the fiscal year July 1, 1935, to June 30, 1936, corresponding to the family income study, was midway between those of the two calendar years, it would have been \$58,862,000. It will be observed that the 1937 figure had traveled more than half the distance between that sum and the 1929 income. The 1938 set-back did not wipe out all of this gain and preliminary estimates for 1939 indicate a national income between 68 and 69 billion dollars, which will nearly restore the 1937 level. Chart XVI illustrates the extent to which national income changes are reflected in the lower brackets.

TABLE 23.—NATIONAL INCOME PAID OUT¹

[In millions of dollars]

	1929	1930	1931	1932	1933
Total income paid out.....	80,243	74,414	62,763	49,296	45,565
Percentage of 1929.....	100.0	92.7	78.2	61.4	56.8
	1934	1935	1936	1937	1938
Total income paid out.....	52,057	55,814	64,207	70,694	65,021
Percentage of 1929.....	64.9	69.6	80.0	88.1	81.0

¹ Source: *Survey of Current Business*, U. S. Department of Commerce, June 1939, p. 12.

Based on trends to date and on the power of recuperation shown by the Nation in the past following periods of crisis, the anticipation of an expanding national income during the 1940's would seem to be justified. As a result of collective bargaining, wage-and-hour legislation, social insurance, and other measures already operative, we may also anticipate a

better distribution of the national income toward the lower levels. The rate at which these events will take place or the set-backs they will doubtless encounter, we cannot predict. But the one thing we can be perfectly sure of is that the present situation is not a permanent one. It will be better or it will be worse. The world, as Galileo is reputed to have said, does move.

COST OF LIVING

The cost of living varies with both time and place. At a given place, it varies from year to year. At a given date, it varies between different geographic sections, between urban and rural areas, and also between larger and smaller urban communities. It varies even more between different nations.

Chart XVII shows how the index of the cost of living (based on a workingman's standardized budget) has fluctuated since 1913 and how much more stable one of its component items, the rent index, has been. Fuel and light have also been relatively stable. Food costs are responsible for the big highs and lows. Clothing prices have fluctuated even more, but exert less influence because of their less important place in the workingman's budget.

A valuable study, *Intercity Differences in Costs of Living in March 1935, 59 Cities*, by Margaret Loomis Stecker, was published in 1937 by the Division of Social Research, Works Progress Administration.

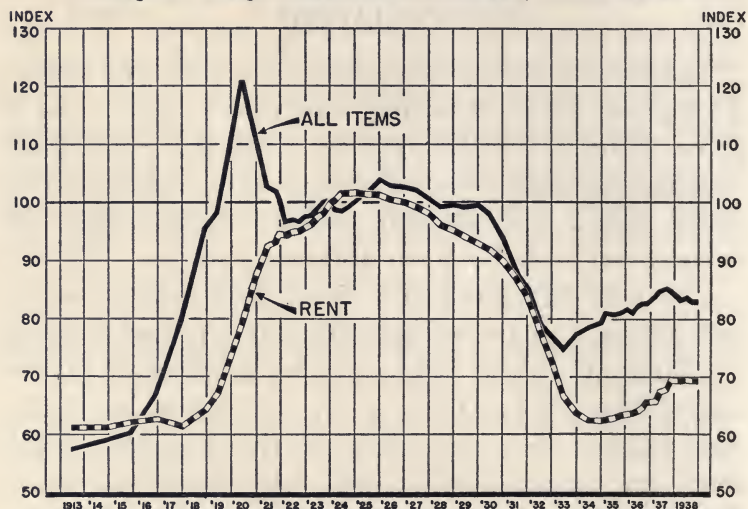
This study is based on the needs of a 4-person family assumed to consist of parents and 2 children of 13 and 8 years. Variations up or down in number or age would affect the total and proportionate expenditures, especially for food, but not the geographic or size-of-city comparison.

The purpose of the study was to ascertain the an-

nual costs of self-support in 59 cities of various sizes (but all over 25,000 population), in various geographic sections, at two levels of living, designated as *maintenance* and *emergency*. The *maintenance* level is intermediate between what the Bureau of Labor

CHART XVII.—COST OF GOODS PURCHASED BY WAGE EARNERS AND LOWER-SALARIED WORKERS

(Average of 32 large cities of the United States, 1923-25 = 100)



FEDERAL WORKS AGENCY RESEARCH AND STATISTICS DIVISION
UNITED STATES HOUSING AUTHORITY RESEARCH SECTION AUGUST 1, 1939

Source: Monthly Labor Review, December 1938, U. S. Bureau of Labor Statistics, p. 1348.

Statistics and collective bargaining committees call the *health and decency standard* and what they call the *minimum subsistence standard*. The *emergency level* is lower than either. It is what should be used by relief agencies, though the majority of them in practice fall below it. Neither represents a desirable level. Neither is what anyone would be willing to call the American standard of living. As the report states: "Those forced to exist at the emergency level for an extended period may be subjected to serious health hazards."

TABLE 24.—AVERAGE ANNUAL EXPENDITURES OF FOUR-PERSON FAMILY IN 59 CITIES, MARCH 1935 ¹

Item	Maintenance level		Emergency level	
	Amount	Percent	Amount	Percent
Total.....	\$1, 261	100	\$903	100
Food.....	448	35	340	37
Clothing, clothing upkeep, and personal care.....	184	15	128	14
Housing.....	222	18	168	19
Household operation.....	154	12	122	14
Miscellaneous.....	253	20	145	16

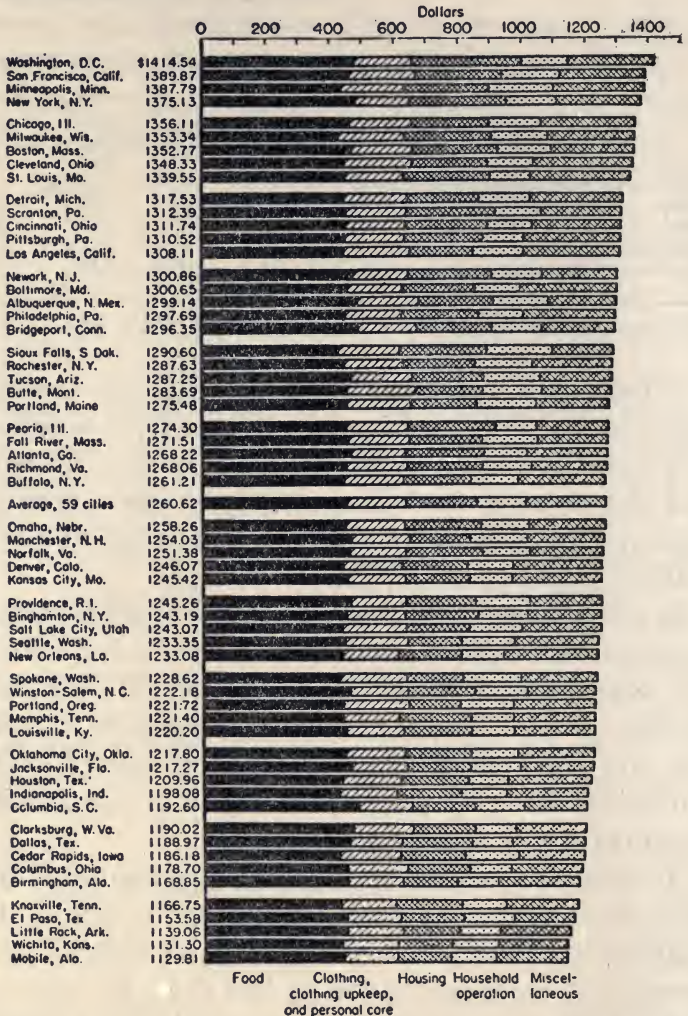
¹ Source: *Intercity Differences in Costs of Living*, WPA 1937, p. XIX.

“Household operation” includes fuel for heating and cooking, light, refrigeration, household supplies, and replacements. “Miscellaneous” covers medical and dental care, insurance, transportation, church, organization dues, gifts, tobacco, education, and recreation. (See chart XVIII.)

It will be noted that there is a less than \$300 spread between the highest and lowest income required for the maintenance level (Washington, D. C., and Mobile, Ala.). The lowest emergency level cost in any city was over \$800 and the highest under \$1,020. Grouping either by geographic region or size of city produces a still smaller divergence.

To many persons the most surprising feature of the chart will be the degree of uniformity in food costs. Extreme deviation from the average at either maintenance or emergency level is less than 10 percent. Sioux Falls and Minneapolis naturally have bigger fuel bills than Little Rock and Houston, and this difference is reflected in household operations. But neither latitude nor longitude will account for the wide variations in rent.

CHART XVIII.—ANNUAL COSTS OF LIVING AT MAINTENANCE LEVEL, BY MAJOR BUDGET GROUPS, 4-PERSON MANUAL WORKER'S FAMILY, 59 CITIES, MARCH 1935



FEDERAL WORKS AGENCY RESEARCH AND STATISTICS DIVISION
UNITED STATES HOUSING AUTHORITY RESEARCH SECTION AUGUST 1, 1939

Source: Intercity Differences in Costs of Living in March, 1935, 59 Cities, WPA Division of Social Research.

The maintenance standard in housing for this hypothetical four-person manual worker's family calls for a dwelling in fair repair, without serious fire hazard, containing a private indoor bath and toilet and four or five rooms of normal size. For such housing, the rent in Washington, D. C., is seen to be considerably more than twice as high as in Portland, Oregon—\$342 per year against \$158.40.

Insofar as geographic differences in incomes (see table 20 for instance) are not matched by corresponding differences in cost of living, they represent differences in standard of living. That one geographic section of a nation should have a lower standard of living than the others is obviously undesirable.

It is interesting to check the calculated average maintenance level cost just discussed with the actual annual expenditures of low-income self-supporting white families (wage earners and lower salaried clerical workers) as gathered by the United States Bureau of Labor Statistics in 10 of the cities during the period 1933-36. The average family size in these cities was found to be larger than that of the hypothetical family—4.75 persons. The average expenditure was almost identical, \$1,257.²

Another check is afforded by a study of the National Industrial Conference Board on the outlay necessary to purchase a synthetic budget for a wage earner's family of four persons in 69 cities during February 1935. Such expenditures averaged \$24.43 per week, or 19 cents more than the \$24.24 of the Works Progress Administration study. The inference is justified that all these figures, independently reached, possess a high degree of validity.

The future cost of living in the United States will

² Source: *Intercity Differences in Cost of Living*, pp. XXV and XXVI.

tend to increase as wages and salaries increase. It will tend to be reduced by improved machines, greater efficiency, mass production. One may hope that the second will at least balance the first, but there is no assurance.

If such balance does not obtain, it is always possible that the American people may belatedly interest themselves in developing consumers' cooperatives, as other democratic peoples, notably the British and Scandinavian, have done under similar circumstances with marked success.

CHAPTER XII

Division of the Field of Housing

NEW HOUSING for self-supporting urban families, under existing cost and income conditions, may be produced as follows:

1. For the top economic third—by private enterprise for profit.

2. For the middle third—by limited dividend or cooperative companies at cost.

3. For the lowest third—by public authorities with subsidy. "May" implies economic suitability. No prophecy is involved as to what is going to happen.

During the centuries when this country was being settled along an ever-receding frontier, the pioneers cut down trees and built their own shelter with their own hands. The next step was to employ a carpenter. Farm houses and rural homes are still built in both these ways, as needed. In cities only the well-to-do can afford the luxury of a home built to order. The great majority who acquire new homes at all get them ready-made.

PRIVATE ENTERPRISE

Real estate subdividers and speculative builders, operating almost always peripherally, whether inside or outside city limits, have come to represent what is meant by private enterprise in urban residential building, along with the makers and dealers in building materials, with whom the public comes less

directly in contact. They have no connection with early American housing habits.

While the feverish activities of this section of the business world have played a conspicuous part in the rapid growth of our cities, it has been neither an enlightened nor a helpful part. The Babbitt fraternity have been responsible for a large share of our present city planning problems, housing problems and blighted area problems. On the other hand, in a larger sense the community itself is responsible for having allowed them such leeway for so long.

The highly speculative and correspondingly irresponsible character of a considerable section of real estate and building operations in the residential field has tended to discourage good construction and conservative investment. It may be hoped that a corner has been turned in this respect.

The top economic third of urban nonrelief families, according to the figures in *Consumer Incomes in the United States* number about 4,720,000, which is a fairly large market.

Using table 8 of the same publication as the basis of calculation, we find that the boundary between top and middle third incomes, in 1935-36, was around \$2,200 in metropolises of over 1,500,000 population. In cities between 100,000 and 1,500,000 it was about \$2,000; in cities of middle size about \$1,750, and in small cities about \$1,700. National income was $10\frac{1}{2}$ percent higher in 1938 than at the earlier date. So the boundary may—or may not—be a little higher now. Multiply it by two for a sound ratio to price of a home (cf. ch. X) and it will be seen that \$4,500 in the big towns and \$3,500 in the small ones is all the trade will bear at the lower end of its market.

These are not building permit figures or construction costs, but *selling* prices.

It is to be hoped that the industry will not try to enlarge its market, as it did during the 1920's, by the anti-social method of persuading people to undertake the purchase of homes they cannot afford. The more responsible section of the industry may exert a restraining influence over the less responsible.

The encouragement of housing built for rent to borderline income groups as well as to the increasing class whose work involves a shifting residence, is thoroughly sound.

Beyond this, if private enterprise wishes to enlarge its field in a downward direction, it must find ways to reduce the cost of its product.

LIMITED DIVIDEND AND COOPERATIVE HOUSING

These types of development, which have been so extensively used in European countries, are known here only by small experimental samples. The middle field with us is nearly empty of new housing. The urban groups whose incomes put them within it habitually live in houses no longer new in neighborhoods which have ceased to be desirable—blighted areas in distinction to slums. Those who own homes own old ones.

From the Consumer Income study it is possible to derive a table showing the family income range of the middle third, by size of community in 1935-36:

Incomes of Nonrelief Urban Families—Middle Economic Third

In metropolises over 1,500,000 population.....	\$1, 300-\$2, 200
Large cities, 100,000 to 1,500,000.....	1, 200- 2, 000
Middle-sized cities, 25,000 to 100,000.....	1, 100- 1, 750
Small cities, 2,500 to 25,000.....	1, 000- 1, 700

Insofar as these figures may be regarded as rough but serviceable markers, they must be understood as applying to families of average size, i.e., two adults and two children. Variations due to size of family will be considered in the next section.

Variations connected with climate further affect both the cost of house construction and the cost of living.

At present, in the United States, the provision of new housing for this middle third is no man's land. It can be occupied by private enterprise only on the basis of low returns on a long-time investment. If approached in this spirit, the more done the better.

Logically enough, this is often claimed to be the section of the population which should receive public assistance, because a comparatively small boost is all these people need to get them into really desirable living conditions. Large-scale operations, loans at low interest, long amortization period, elimination of speculative profit, are enough to bring new housing within their means without subsidy. Insofar as the middle-income families are supplied in this manner, the fair-to-middling houses they vacate can be turned over to the inhabitants of slums and the unfit slum houses demolished. This is the process known as "filtering up".

Unfortunately, the "filtering up" process is rather theoretical than actual. The owner of a middle-income house, which has been vacated, does not willingly or promptly lower his rent, or accept tenants from the slums. The only slum houses which can be demolished without compensation are the very worst ones, in which the poorest families live. It would be a borderline family which would eventually move into the vacated middle-income

house, or some other middle-income house vacated by a family who had moved to the first. And only after a long series of moves would the wholly bad slum house be empty and ready for demolition. Never, at any time or any place, has "filtering up" by itself solved the slum problem.

On the other hand, there is lack of equity in a situation where new housing is produced for those at the bottom and for those at the top, while those in the middle must stay all their lives in drab, inconvenient, outmoded housing which has started downhill.

The answer seems to be that in framing a national housing program, the needs of all economic groups should be taken into account and appropriate mechanisms provided for meeting them. If the various parts of the program are encouraged to advance simultaneously, they will probably help each other. If the effort is made to complete one section before allowing another to start, the result is likely to be obstruction and slowing-up.

In this country we have had a scattering series of experiments, on the part of civic-minded persons, with voluntarily limited profits. But during more than 40 years, barely 20,000 family units have been produced by variations of this idea. The hope of early enthusiasts that this would become a favorite form of investment because of combined safety and usefulness has not, so far, been fulfilled. Its inherent reasonableness remains.

The first appearance in this country of legally limited dividend housing came with the New York State Housing Act of 1926. The State Board of Housing set the standards and furnished the supervision. The statute itself set maximum rents. The benefits

offered investors were partial tax exemption and the board's good offices in obtaining a first-mortgage loan. Second mortgages were not permitted. Returns on the equity were limited to 6 percent.

European limited dividend housing societies (called "public utility" in several languages) receive loans at low interest rates—sometimes from government sources, sometimes with partial tax exemption, sometimes with the right to build on publicly owned land—in return for accepting limited profits, limited rents, and public supervision. Sometimes the incorporators are actuated wholly by civic motives, as in the case of many efforts to assist large families. More often they are conservative investors willing to accept a moderate return accompanied by safety.

Housing cooperatives are composed of tenants. Genuine cooperatives, involving cooperative ownership, are particularly well represented in the Scandinavian countries, where large experience has developed technical and administrative ability to handle them as efficiently as any other form of big business.

In Holland, on the other hand, the cooperative housing societies—or at least the working-class societies—although they take the initiative in planning and promoting a project, are responsible for its management and enjoy a monopoly on its occupancy, never actually own it. At the end of the amortization period the city housing department will hold the title.

Real cooperative housing along the Swedish lines we cannot have in this country unless or until we develop a cooperative frame of mind and acquire cooperative experience. But something on the Netherlands model could be fitted into our existing

system at any time. If the lending policy followed the Dutch lines, it ought to serve an economic group immediately above that in the subsidized public projects and definitely lower than that in the New York State projects—which in turn serve a lower-income group than that generally reached through the Federal Housing Administration.

SUBSIDIZED PUBLIC HOUSING

Under existing conditions, however, only subsidized public housing can help the lowest third.

On the other hand, it is the duty of relief agencies, not of housing agencies, to provide the rent for families which are not self-supporting. As already stated, it is not to be anticipated that the problem of relief will remain indefinitely at its present magnitude. But it will never completely disappear. So the mechanism for dealing with it should be worked out.

Not all families in the top economic third choose to provide themselves with new housing. Some of them prefer to take the pick of the older houses in good repair, and so the cream has been skimmed from the used-house supply before the families in the middle third get their chance. Almost no new housing reaches them, but they outbid the lowest third for the less undesirable of the old. Those near the bottom get what no one else wants.

Dollar income means nothing unless related to the size of the family. A few extra children will drag the better paid worker right down to slum housing also. Those boundary incomes we considered a while ago are for families of average size. The four-person family is as near as we can come to that without vivisection. If a housing authority wishes

the top tenant incomes it sets to follow a line of similar living standards, it must vary them with the size of the family.

This is why it would be so very unwise to set a statutory limit on the dollar incomes of the public housing tenants. Whatever the figure, it would be grossly unfair to big families in comparison with small.

The British, after the war, built nearly a million working class cottages with three bedrooms each (some with more) before they began devoting attention to the needs of smaller families and old persons. It was a case of "children first." This policy is of far-reaching social importance. The Dutch, Belgians, French, and Norwegians have at least tried to follow the same objective. But Sweden, Germany, Austria, and Italy, and various other countries, have economized on bedrooms, offering, however unintentionally, the alternative of race suicide or overcrowding. Sweden has recently become worried about her falling birth rate and the plight of large families and has devised a plan (1936) to subsidize their rents in larger quarters. Whether or not that is as wise a method as subsidizing the houses themselves is open to argument.

Furnishing a healthful type of housing to families of wage earners in the lower paid occupations, below cost, with the taxpayers footing the bill for the difference, is a particularly useful way of redistributing part of the national income and giving the taxpayers their money's worth in terms of public health and good citizenship. It is not a substitute for higher wages, but a very useful supplement. It upsets the national economy less than any other measure producing comparably important results. For the kind of home one lives in is one of the big facts of life.

UNITED STATES HOUSING ACT OF 1937

In contrast to European countries with their long experience in government-aided public housing, and the systematic effort, especially in Great Britain and Holland, to clear slums and rehouse the families living in them, our experience in this country dates only from July 1933, and as a permanent policy only from the President's signing of the Wagner-Steagall Housing Act on September 1, 1937, and the establishment of the United States Housing Authority on November 1 of the same year.

Housing under the Public Works Administration.

Housing was authorized in the National Industrial Recovery Act of 1933, on an emergency basis, as one of the types of public works for which the Public Works Administration could make loans and grants to State or local public bodies provided such bodies were empowered to clear slums and erect low-rent housing. At that time no agency having these powers existed, and in no State could one be appointed without a State enabling act. In view of the time necessary for these preliminary steps, the Housing Division of the Public Works Administration, after convincing itself that neither really low rents nor extensive employment could be secured through limited dividend housing (for which it could also make loans) embarked on a demonstration program of its own.

This valuable American experiment resulted in 21,700 family units in 51 projects in 36 widely distributed communities. Standards of design and lay-out are good. Playgrounds and other features of wholesome community life are available within or adjacent to the projects. More than half are on

cleared slum sites. Nearly half are for Negro families, whose housing needs are especially acute. The program, in view of the great difficulties and obstacles to be overcome, was remarkably successful, but no one regards it as the ultimate pattern to be followed or the last word in cost reduction. Tenants were selected from families living in substandard housing, though undoubtedly not from the lowest income strata of such families. Shelter rents averaged \$5.10 per room per month, which is comparable to many slum rents. These rents were fixed under the original George-Healey Act providing for a 45-percent write-off on development cost. The 1937 act permits a larger subsidy which has brought about a considerable reduction in rents.

All this was part of the emergency program to provide employment for the hard-hit construction industry through useful public works. If we had had the housing program already under way—legislation, court decisions, administrative machinery, trained personnel, established standards, costs and rents, tenant selection, management policies, and, above all, an active and discriminating public opinion—the quick expansion of slum clearance and low-rent public housing could have been accomplished and would have furnished an ideal method of stabilizing the construction industry and its subsidiaries, and, automatically, this would have created the purchasing power to revive the consumption goods industries. Recovery from the 1933 low probably would then have been much prompter and steadier than it actually was. But modern air transportation did not burst into bloom immediately after the Kittyhawk flights, and mass production of automobiles did not happen

overnight. It took England more than half a century of trial-and-error experiments to work out a reasonably effective technique for clearing slums and rehousing their inhabitants, and by that time English public opinion was well informed and vigilant. Holland, starting considerably later, and having the near-at-hand British experience to profit by, still required a couple of decades to get going satisfactorily. Only the ignorance of inexperience could have expected to get a completely satisfactory large-scale program under way in this country in a matter of months. Actually, the advance has been spectacularly rapid.

Provisions of the Wagner-Steagall Act.

The second and even more important step was taken when growing public interest resulted in the enactment of the United States Housing Act, which established subsidized public housing as a permanent, national policy in this country, while placing the responsibility for its initiation, execution, ownership, and management on the local communities.

It would be hard to exaggerate the potential significance of the declaration in the first section of the act: "It is hereby declared to be the policy of the United States to promote the general welfare of the Nation by employing its funds and credit, as provided in this act, to assist the several States and their political subdivisions to alleviate present and recurring unemployment and to remedy the unsafe and insanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of low income, in rural or urban communities, that are injurious to the health, safety, and morals of the citizens of the Nation."

The dual purpose of the act has been criticized on the ground that the improvement of housing conditions for low-income families is a major national problem, which should command our best efforts for its own sake. Even so, taking the long view, the hook-up of the two objectives should prove helpful rather than the reverse. As a part of wise national planning, nationally aided public housing could prevent the wave motion produced by private enterprise residential building from ever again reaching such a disastrous low as it registered during the recent depression years. (See chart VI.) But there must be accepted standards, accepted techniques, and trained personnel to start with. There must be thoroughly tested experience. And all this must be found, not just in the Capital, but in every State and Territory. So, for either objective, a prerequisite is a well-developed and well-tested national housing program continuing without interruption, which may be expanded as private building slackens after a period of activity, in order to keep employment at a more or less uniform level, and at the same time catch up on some of the arrears of worn-out housing replacement.

The United States Housing Authority is a fiscal and standard-setting agency, which does no slum clearance or building itself, but lends to local public housing authorities as much as 90 percent of the capital needed for an approved project. This loan is to be repaid in full by the local authority in a period not to exceed 60 years, at an interest rate at least one-half percent above the going Federal rate. The other 10 percent must be supplied by the local authority in land, services, or by selling its bonds

to buyers other than the United States Housing Authority.

To bring rentals within the means of very low-income families, the United States Housing Authority may make annual grants, provided the State, city, or county in which the project is located makes a contribution at least equal to 20 percent of this amount, whether in the form of cash, tax exemptions, or remissions, and provided as many insanitary dwelling units are eliminated, on the site or elsewhere, as there are new units built. In case of proved shortage, this elimination may be postponed, but must be carried out later.

If the contract for annual contributions is for more than 20 years, it is subject to review after 10 years and every fifth year thereafter, with the idea of reducing or discontinuing the grant as economic conditions permit. In no case may annual contributions run for more than 60 years or exceed in amount a sum equal to the going Federal rate of interest on the cost of the project, plus 1 percent.

To assure economy, a limit of \$1,000 per room or \$4,000 per dwelling unit has been set on construction cost, except in cities with over 500,000 population, where the limits are \$1,250 and \$5,000.

Tenants are to be selected from families otherwise obliged to live in substandard housing and whose incomes are not more than five times the rent and cost of utilities—unless the family has three or more dependent children, when the limit is set at six times. There is no obligation, however, to accept tenants up to either limit.

Program under the Housing Act.

The first congressional authorization was for loans to a total of \$500,000,000 (later increased to

\$800,000,000) and annual grants not exceeding \$20,000,000 (later increased to \$28,000,000).

On November 1, 1939, two years after the establishment of the United States Housing Authority, 38 States, the District of Columbia, Puerto Rico, and Hawaii had enabling acts and 266 local housing authorities had been appointed. The growth in public interest has been phenomenal.

On the same date loan contracts to a total of \$521,097,000 had been made with 133 local authorities for the building of 114,356 family units in 296 projects, expected to rehouse about 457,000 persons. There were also preliminary "earmarkings" of \$150,994,000 additional. On 47,790 units of the former group, construction was under way. The first tenants had moved into the earliest projects. Contracts show commendable cost reductions, and substantially lower rents than in PWA projects appear to be assured. Rents in the South will be materially lower than in the North. Methods of reducing the costs of management are being studied. Here, as in construction and design, the PWA projects furnish an invaluable laboratory. On an expanding scale, future public housing programs will profit from the present experience of the USHA.

CHAPTER XIII

Housing and Planning

NEIGHBORHOOD, CITY, STATE, AND NATIONAL

TO LOOK into the future and plan for it is only to exercise ordinary intelligence. The individual who fails to do so for himself or for his family lacks an essential element of success. The same is true for communities and for nations.

In the old agricultural pioneering days, the family on its farm was nearly an independent self-sufficient unit. It never was completely so. It cooperated with its neighbors in church, town meeting, and defense against the Indians. There were always things it could not accomplish alone.

With the growth of towns, the need to learn to live together and work together, to respect the rights of others as well as to protect one's own rights against encroachments, grew stronger. The two needs struggled for supremacy, as they should. The existence of the solar system depends on the balance between centrifugal and centripetal forces. If either one got the upper hand, we earth-dwellers would be in a bad way. The future of large urbanized and industrialized democracies may well depend upon our ability to preserve a similar balance between the rights of the individual and the collectivity.

In spite of our individualism and our horror of regimentation, we Americans are rather good at doing things together, when we do them because we want to. Our fondness for organization, our tendency

to be "joiners" are proverbial. Our business organizations, women's organizations, church and charitable organizations, are efficient and powerful. Of course some of A's most cherished "movements," in B's honest judgment, would lead us to disaster, and vice versa. But that is democracy.

NEIGHBORHOOD

A generation ago Americans began to worry about the tendency of urban neighborhoods to deteriorate. It was not merely the enroachment of expanding business and industry, which they were already used to, and which, like a child's outgrowing its clothes, one accepts as the price to be paid for an inherently desirable process. It was rather the damage done by the ill-considered and inconsiderate act of some headstrong rugged-individualist property owner. Ninety-nine home owners might have settled down to spend the rest of their lives and bring up their children in a pleasant, wholesome and congenial neighborhood. They might all take care of their lawns and trees, trim their rose bushes, keep their houses painted, and pay their taxes. But if the hundredth owner developed a grouch and sold his property for a filling station or if he had erratic ideas of progress and covered his side yard with a tall brick apartment building running to the sidewalk line, the character of their neighborhood was changed, its restful charm was gone, and their only remedy was to move away and try again.

Out of this situation came "zoning." From 1915 to 1930 it swept the country. Imperfectly framed and imperfectly enforced as zoning ordinances have been, they have, on the whole, served a highly useful purpose in preserving neighborhoods unspoiled for the greatest good of the greatest number.

Through a series of decisions culminating in the Supreme Court, zoning has established its connection with health, morals, safety, and welfare. Not only do height of buildings and the extent of open space around them have relation to health, or the character of traffic to safety, but one is not being snobbish or crotchety in objecting to a grocery store or a barber shop on a street of homes. As Mr. Justice Sutherland said in a memorable decision:¹ "A nuisance may be merely a right thing in the wrong place—like a pig in the parlor instead of the barnyard."

Zoning has been a boon to families of moderate means. The wealthy could always protect themselves by living in restricted districts or owning large estates. Workingmen well enough off to live in new sections have been helped too, those in older sections very little, those in slums not at all.

No one ever set out deliberately to create a slum. It is the end product of long continued individualistic anarchy and civic neglect. When a slum clearance and rehousing project is planned, an amendment of the local zoning ordinance is sought to create a residential district for the protection of the new homes.

It is a maxim thoroughly accepted among students of housing that a slum cannot be redeemed by scattering a few new houses through it. The slum swallows them instead. A project must be carried out which is large enough to create a neighborhood atmosphere of its own—large enough to maintain itself against the surrounding slum.

In order to secure a site of sufficient size, or sometimes because they cover too much of the land,

¹ *Village of Euclid, O. vs. Ambler Realty Co.*, 272 U. S. 365 (1926).

fairly good houses have to be torn down at times. The next step is to replan lots and streets so as to admit sunlight and air in abundance—one of the major objectives of a housing program.

The new neighborhood must contain safe play spaces for small children under their mother's eye, whether in individual house yards or under apartment-house windows. It must supply recreation space indoors and out to older children, and meeting places for the social and educational needs of all ages. Schools, churches, shops, health centers must be easily accessible if not on the premises. It will be as free from lawless or openly corrupting influences within its borders as are the neighborhoods in which parents with higher incomes bring up their children. It is not the lot of human kind to escape contact with evil. But it should be within the power of all parents to shield their children from premature and excessive exposure to it until they have time to build up some degree of immunity.

CITY AND REGION

Obviously, this large-scale tearing down, replanning and rebuilding in slum areas, or anywhere else, cannot be carried on without reference to the city plan.

It is only within the last few years that American city planners are becoming housing-conscious. They started out with enthusiasm for civic centers and the "City Beautiful." Then they turned practical and concentrated on the traffic problems that developed with the automobile. They have done fine work with parks and parkways. Zoning is, of course, one phase of city planning—that dealing with the problems of height, density, and use of buildings.

Recent land-use studies have shown how little area

business really uses (especially since it took to vertical development). The average area devoted to business in a number of towns of different sizes and types, lies between 2 and 3 percent. Industry needs more space and varies more, but, including railway yards, seldom uses more than 10 percent of a city's area. Most zoning ordinances reserve very much more, especially for business. The effect on such superfluous areas has been to blight them. Streets take up a good deal of room and parks and playgrounds ought to. Nevertheless, the fact is that about half of the average town area should be zoned for residence, with such limitations of height and bulk as to assure ample and permanent light and air and elbow room for all. These are necessities, not luxuries, and should not depend on income. They do not so depend in a state of nature, nor do they in any rural setting. The urban attempt to corner them and set a price on them is one of the most unlovely exhibitions of human greed on record, but it seems to have occurred to city builders all over the world throughout the ages.

If we are to maintain a successful urban civilization without deterioration of the race, we must find a way to return this part of the common heritage to the people of our cities.

The city planning movement has been active in the United States since the Chicago World's Fair. It grew especially fast and standardized much of its practice during the 1920 decade. Yet only one State, Massachusetts, has *compulsory* city and town planning even now. And only a few communities have given their plan the force of law after it was completed. Yet, without this step, the influence of the city plan is, at best, uncertain.

Entirely apart from housing, our cities are faced by the need to plan, and in a large measure to rebuild themselves, if they expect to survive the next few decades. Reckless exploitation has taken place, quite comparable to the waste of our natural resources—forests, coal, oil, water supply, topsoil, grazing lands, birds, fish, and other wildlife. As Stuart Chase expressed it, the pioneers were obsessed by the concept of infinity. They were not trying to impoverish their grandchildren. But there was such a vast amount of everything that the possibility of exhausting it never crossed their minds. Much that has been destroyed is irreparably lost. But the awakening came, fortunately, in time for self-preservation, and the task of rescue and conservation is under way.

The town builders had a concept of infinity, too. Each one thought his home town was going to go on growing forever and that real estate values would keep increasing forever. Each one thought that anything constructed with hands was an "improvement." Subdivisions were planned with a T-square on the office table. Whether their "avenues" and "boulevards" would fit onto the city streets when the city grew out to meet them was seldom considered. Foredoomed to early blight, these unrelated developments often became scattered centers of deterioration far from the larger slum areas. A street map of Brooklyn looks as if it had been made in an insane asylum.

If there is any real reason for a given city to continue to exist, perhaps it will find a way to replan and rebuild itself, turning its waste spaces to fruitful use. If there is no compelling reason to stay, its industries are likely to gravitate to other cities or

to cleaner, greener new towns in the open country, which can be planned for good living at the start. *Decentralization* and *recentralization* are the terms used for this process by the regional planners. The availability of cheap electric power in increasing quantities makes decentralization possible.

With no new population coming in, it would not take much of this siphoning off of population and industry to put some of our cities into bankruptcy. Perhaps that is the way they will go. Cities are not immortal. It may be that those which grew too fast and too carelessly are likely to die young.

It is not possible for subsidized public housing to bear the tremendous financial burden of clearing all our slums and rehousing all their inhabitants on the site. In one sense, it is not the problem of public housing at all. The purpose of public housing is to get families in low income groups into housing which will be good for their health and citizenship, at minimum outlay by the taxpayers. Would it not be logical to take a leaf from the realtors and build on cheap vacant land in the outskirts, leaving the slums to rot? Yes; but unless the slum houses are demolished, some people will still continue to live in them. And some of the people whose work is near the slums will be forced to travel a long distance to work, at a wasteful expenditure of time, money, and vitality. And the city has schools, hospitals, streets, sewers, and fire and police stations in the central district. The taxpayers will have to build new ones for the peripheral project. So they may not be saving money after all.

The best hope for rational action lies in a city plan integrated with plans for public housing. A city planning commission which takes its duties

seriously will try to foresee the most efficient use for every part of the city area for the next 50 years.

The local housing authority and the city planning commission, working together, should be able to say (and demonstrate by supporting facts) how much low-rent housing is really needed in central areas, which slum sites, if any, are likely to be absorbed by business or industry, which should be made into parks, which would lend themselves to higher-priced housing by private enterprise within walking distance of centrally located offices.

Housing authorities will need to be opportunists with the wisdom of serpents as well as the engaging qualities of doves, in order to acquire their sites when the market is favorable.

It is instructive to look at a map of the "housing estates" belonging to the London County Council, which was landlord on December 31, 1936, to 78,684 of its low-income families.² The "estates" are sprinkled all over the map in nearly 200 localities. The largest number of sites, though accommodating a minority of families, are developed with "block dwellings" (apartments) within 5 miles of Charing Cross. The "cottage estates" are mostly in the 5-to 10-mile zone, though some of the largest are farther and even outside the county of London. They are open, well-planned, thoroughly wholesome places to live in.

The "satellite Garden City," as defined in England, is shown in its complete form only in the privately developed Letchworth and Welwyn, which are almost ideal industrial garden cities, near enough

² The number was just under 10,000 in 1914. (Building did not begin again until 1919.) In addition, the 28 metropolitan boroughs and city of London, which together constitute the county, had built at the same date 24,626 family units, making a total of more than 103,000. Source: *London Housing*, London County Council, 1937.

London to make use of the advantages the larger city has to offer. Wythenshawe, owned and developed by the city of Manchester, is more of a suburb than a satellite.

In this country the privately developed Radburn (New Jersey) embodied some of the English Garden City ideas and developed some new ones of its own, notably the superblock, to save children and other pedestrians from the perils and nerve strain of the motor age. But it has no industries.

A useful demonstration of good planning for good living was made by the Resettlement Administration, with relief labor, in the three widely separated greenbelt towns—Greenbelt itself near Washington, Greenhills near Cincinnati, and Greendale near Milwaukee. The shopping and amusement center at Greenbelt has been entrusted to consumer cooperatives.

STATE AND NATION

Obviously, planning cannot stop at the city's political boundary. So we have developed metropolitan planning and regional planning, some official, some nonofficial. Our best known and in many ways standard-setting regional plan of New York, published in 1929, was financed by the Russell Sage Foundation. Though without official status, it has exerted a great deal of influence. Unfortunately, it was prepared during the period before city planners realized that housing vitally concerned them.

Way back in 1889, the Metropolitan District of Boston was created with a unified system of police, water, and parks. During the 1920 decade, nine States passed enabling legislation permitting the appointment of county or other forms of regional planning boards, and considerable useful work was done.

State planning was the next logical step. Wisconsin and New York were pioneers. Since 1930, and especially since 1933, 45 States, Alaska, Hawaii, and the District of Columbia have set up planning boards. They are advisory only. They are concerned with the conservation and best use of the natural resources of the State and also with the conservation of human resources—matters of health, education, and welfare. Practice and emphasis vary. So does the extent to which the boards act as coordinators of city and regional planning boards and the extent to which they feel it within their province to stimulate the creation of such local bodies where they do not already exist.

The most difficult and the most necessary function of all is national planning. Informally, but with great usefulness, the National Resources Committee for the last few years has been assembling and publishing the sort of basic information that is needed in this connection—on population, cities, incomes, technological trends, land planning, water planning, the planning of public works. A number of these studies have been quoted in the preceding pages.

No attempt has yet been made to draw up a national housing policy for the next 5, 10, or 25 years. Undoubtedly our approach has, until very recently, been too experimental and uncertain to permit this. But unless we are to have an enormous amount of waste motion and lost time, we should begin to work out a long-term policy and program.

We now possess basic legislation, State and National. We have had basic court decisions.³ We have national and local administrative machinery. We are developing standards of lay-out and design, cost, rent,

³ See Appendix D.

tenant selection, management. They have not reached the ultimate stage of perfection. But can anything approaching it be reached on a "fits and starts" basis? Do not the local authorities and their communities need to know, not only what funds the United States Housing Authority has on hand this year, but what it is likely to have next year and five years from now? Plans could be more carefully prepared if the "now or never" feeling were removed. The universities would be more willing to provide adequate training courses, and students would feel safer in pursuing them, if there were some assurance of continuity of demand for trained staff workers. Further, young men cannot be expected to seek training in the building trades, and building trade unions cannot be expected to enlarge their membership without reasonable expectation of a sustained volume of employment. This same consideration applies to manufacturers of building materials when they are asked to enlarge the capacity of their plants to accommodate an expanded building program.

As was pointed out in chapter XI, it was the adoption of a 15-year program and a 2½ million family unit production goal by the British Government, in 1924, which made the gentleman's agreement on construction cost stabilization possible. Program and agreement referred only to subsidized public housing, but private enterprise building reaped its full share of the benefit, and being wise enough to pass much of this benefit on to the consumer, it found that there had been opened a large new market, previously untouched. Now, for a decade, the industry has enjoyed the greatest prosperity of its history.

Part of the careful analysis leading to a national

program should result in the delimitation (not too inflexibly, of course) of the respective fields of private enterprise and public housing. Once it is granted that the top-income third is the field of activity for the one and the bottom-income third for the other, we shall have gotten rid of much useless controversy.

When it is realized that the standards of living from top to bottom of the lowest economic third of our population represent wider divergencies than those of our highest economic third, the futility of expecting any single formula to provide housing for all the ill-housed will become apparent. There is more of a gap between the family with \$1,000 a year and the family with \$100 than between the multimillionaire and the \$1,800 office worker. The housing problem is not single, but manifold. The solution also must be manifold.

The National Government has completed experimental demonstrations in rural housing by the Farm Security Administration and its predecessors (almost 13,000 units) and in urban housing by the Public Works Administration Housing Division. The work of the latter was briefly summarized in the preceding chapter. A permanent agency has now been created in the United States Housing Authority, empowered to assist local housing authorities endeavoring to eliminate slums and build good housing with rentals sufficiently subsidized to reach the ill-housed third of the population. The Department of Commerce, Federal Housing Administration, and Federal Home Loan Bank Board assist investors and builders who represent private enterprise. The Department of Labor provides information on rents and standard of living of interest to all workers.

Oddly enough, in a country traditionally devoted

to home ownership, neither the United States, nor any of the States (except California,⁴ for its veterans) has developed an agency to make home ownership safe to the family of borderline means. Existing agencies sincerely believe that they are doing this. But they are primarily for trade promotion. They can no more serve vender and purchaser equally than a lawyer can appear for both plaintiff and defendant.

The Belgian Housing Act of 1889⁴ and the New Zealand Advances to Workers Act of 1906⁴ involve no subsidies. More than a tenth of all the families of each country have acquired homes under the provisions of these laws *and kept them*. During all those decades only a fraction of 1 percent of the mortgages granted have been foreclosed. Contrast that with our foreclosure figures without such protection! The British Small Dwellings Acquisition Act of 1899, with similar aims, was little used until 1923. Since then it has become of rapidly increasing importance.

It will help if we remember not to put the cart before the horse. The consumer really does not exist by Divine Providence to provide profits for business and industry. On the contrary, business and industry, mechanisms of wholly human origin, exist to maintain the multitude of homes, big and little, which contain men, women, and especially children, who are to carry on the human race.

Facts have been assembled from many sources to demonstrate that the physical and psychological health of children is profoundly affected by the dwelling and neighborhood in which they live. It has also been shown that under the highly artificial conditions of urban life it is not possible for a large proportion of employed wage earners to control their

⁴ See Appendix G.

home environment or to purchase enough sun, light, air, and space for their families to assure health. The wives of these workers are unreasonably expected to create bricks without straw when they are called on to be homemakers in slums. Under these circumstances the provision of homes passes as inevitably to a public utility basis as the provision of city water.

The equality of opportunity in which we all believe (however far we have fallen short of achieving it) involves a fair chance to every individual for bodily and spiritual health and for a normal family life.

It has been well said that there is no better test of the civilization of a nation than the kind of homes the masses of its people live in.

Lincoln's luminous reasoning about slavery and freedom in his "House divided against itself" speech of 1858 would be as applicable today to the incompatibility of slums and democracy.

Either democracy will destroy the slums, or the slums will destroy democracy.

Appendix

APPENDIX A

Index of Real Property Inventories, by States and Localities

State	City or county	State	City or county
Alabama.....	Birmingham	Indiana (con.)	New Albany
Arizona.....	Phoenix		Plymouth
Arkansas.....	Little Rock		Richmond
California.....	Alameda County		South Bend
	Oakland		Terre Haute
	Piedmont		West Lafayette
	Sacramento		Whiting
	San Diego	Iowa.....	Des Moines
	San Leandro	Kansas.....	Arkansas City
Colorado.....	Colorado Springs		Chanute
	Pueblo		Dodge City
Connecticut.....	Stamford		El Dorado
	Waterbury		Emporia
Delaware.....	Wilmington		Hutchinson
District of Co-			Independence
lumbia.....	Washington		Kansas City
Florida.....	Jacksonville		Lawrence
Georgia.....	Atlanta		Manhattan
Idaho.....	Boise		Topeka
Illinois.....	Aurora		Wellington
	Decatur		Wichita
	Joliet		Wyandotte County
	Peoria	Kentucky.....	Louisville
Indiana.....	Anderson		Paducah
	Crown Point	Louisiana.....	Baton Rouge
	East Chicago		Shreveport
	Elkhart	Maine.....	Portland
	Evansville	Maryland.....	Frederick
	Fort Wayne		Hagerstown
	Gary	Massachusetts....	Boston
	Hammond		Cambridge
	Hobart		Chelsea
	Indianapolis		Everett
	Jeffersonville		Haverhill
	Kokomo		Newton
	Lafayette		Springfield
	LaPorte		Worcester
	Marion	Michigan.....	Lansing
	Michigan City	Minnesota.....	Duluth
	Mishawaka		Minneapolis
	Muncie		St. Paul

Index of Real Property Inventories, by States and Localities—Con.

State	City or county	State	City or county
Mississippi-----	Jackson	New Jersey (con.)	
Missouri-----	Jasper County	Somerset Co--	5 municipalities
	Joplin	Sussex Co-----	3 municipalities
	Kansas City	Union Co-----	Elizabeth and 12 other municipal- ities
	St. Joseph		
	Springfield	Warren Co-----	2 municipalities
Montana-----	Butte	New Mexico-----	Albuquerque
Nebraska-----	Lincoln		Santa Fe
	Omaha	New York-----	Albany
Nevada-----	Reno		Binghamton
New Hampshire--	Concord		Buffalo
	Manchester		New York City
	Nashua		Syracuse
	Portsmouth	North Carolina---	Asheville
New Jersey: ¹			Greensboro
Atlantic Co----	Atlantic City and 9 other munic- ipalities	North Dakota----	Fargo
Bergen Co-----	68 municipalities	Ohio-----	Akron
	Burlington Coun- ty		Alliance
	3 municipalities		Ashtabula
Camden Co----	Camden and 9 other municipal- ities		Canton
			Cleveland
Essex Co-----	Newark and 14 other municipal- ities		Columbus
			Lima
Hudson Co-----	Jersey City and 11 other munic- ipalities		Marion
			Massillon
Hunterdon Co--	3 municipalities		Portsmouth
Mercer Co-----	Trenton and 5 other municipal- ities		Salem
			Steubenville
Middlesex Co--	12 municipalities		Youngstown
Monmouth Co--	2 municipalities		Zanesville
Morris Co-----	1 municipality	Oklahoma-----	Oklahoma City
Ocean Co-----	2 municipalities	Oregon-----	Portland
Passaic Co-----	Paterson and 9 other municipal- ities	Pennsylvania-----	Allegheny County
			Allentown
			Arnold and New Kensington
			Bethlehem
			Bradford
			California
			Canonsburg
			Charleroi

¹ In addition to the 177 completely enumerated municipalities, 42 others in the same and 4 remaining counties were partially covered. In New Jersey, a municipality is *any incorporated unit* of local government, whether city, borough, town, village, or township.

Index of Real Property Inventories, by States and Localities—Con.

State	City or county	State	City or county
Pennsylvania (con.)		Texas-----	Austin
	Coatesville		Dallas
	Delaware County		Wichita Falls
	Donora	Utah-----	Salt Lake City
	Easton	Vermont-----	Burlington
	East Washington	Virginia-----	Bluefield
	Erie		Hopewell
	Jefferson County		Martinsville
	Lancaster		Newport News
	Meadville		Norfolk
	Monessen		Portsmouth
	Monongahela		Richmond
	New Kensington		Winchester
	Philadelphia	Washington-----	Seattle
	Pittsburgh	West Virginia----	Bluefield
	Scranton		Charleston
	Washington and		Clarksburg
	East Washing-		Fairmont
	ton		Huntington
	Waynesburg		Martinsburg
	Williamsport		Morgantown
Rhode Island----	Providence		Moundsville
South Carolina----	Charleston		Parkersburg
	Columbia		Princeton
	Spartanburg		Wheeling
South Dakota----	Sioux Falls	Wisconsin-----	Kenosha
Tennessee-----	Knoxville		Racine
		Wyoming-----	Casper
			Cheyenne

APPENDIX B

Housing conditions disclosed by real property inventory taken in 64 American cities, 1934

[Source: Taken from, or based on, data collected and compiled by the Real Property Inventory, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce]

No.	City	Popula- tion, 1930 Census	Structures				Dwelling units				Single-family owner-occupied values under \$1,500	
			Total resi- dential	Age over 40 years		In bad condition ¹ (classes 3 and 4)		Rental units under \$15		Total		
				Number	Per- cent	Number	Per- cent	Number	Per- cent			
	Total, 64 cities.....	7,711,170	1,491,223	249,784	16.7	270,194	18.1	2,102,776	432,427	20.6	84,318	4.0
1	Cleveland, Ohio ²	900,429	136,628	31,468	23.0	25,379	18.6	232,170	30,647	13.2	1,136	1.5
2	Minneapolis, Minn. ³	464,356	83,604	13,602	16.3	11,318	13.5	127,832	10,974	8.6	1,699	1.3
3	Seattle, Wash. ²	365,583	81,334	2,464	3.0	14,155	17.4	114,602	19,325	16.9	7,978	7.0
4	Indianapolis, Ind. ³	364,361	79,623	17,226	21.6	16,447	20.7	110,416	30,267	27.4	3,615	3.3
5	Portland, Oreg. ²	301,815	74,818	4,379	5.9	11,820	15.8	96,225	20,713	21.5	5,506	5.7
6	St. Paul, Minn. ³	271,606	51,578	10,984	21.3	8,182	15.9	71,570	6,176	8.6	1,963	2.7
7	Atlanta, Ga. ³	270,366	48,976	5,258	10.7	14,286	29.2	72,266	29,086	40.2	1,970	2.7
8	Dallas, Tex. ³	260,475	55,234	1,653	3.0	9,540	17.3	71,274	14,631	20.5	3,762	5.3
9	Birmingham, Ala. ³	259,678	54,027	2,832	5.2	15,171	28.1	69,950	38,402	55.0	4,600	6.6
10	Providence, R. I. ³	232,981	33,525	13,968	41.7	3,228	9.6	66,734	9,308	13.9	158	2.2
11	Syracuse, N. Y. ³	209,326	33,754	10,377	29.0	2,982	8.3	56,340	4,826	8.6	128	2.4
12	Worcester, Mass. ³	195,311	25,546	7,562	32.1	2,655	11.3	48,534	4,309	8.9	213	4.4
13	Oklahoma City, Okla. ³	185,389	34,755	184	0.5	5,618	16.2	44,302	8,875	20.0	2,812	6.4
14	Richmond, Va. ³	182,529	32,191	9,848	30.6	6,272	19.5	45,673	11,958	26.2	1,467	3.2
15	San Diego, Calif. ³	147,995	42,953	1,433	3.3	5,644	13.1	53,379	6,029	11.3	2,755	5.2
16	Des Moines, Iowa ³	142,559	34,183	5,296	15.5	6,670	19.5	41,603	6,258	15.0	3,414	8.2
17	Salt Lake City, Utah ³	140,267	27,327	4,431	16.2	5,171	18.9	37,299	6,286	16.9	2,593	7.0
18	Jacksonville, Fla. ³	129,549	30,097	1,004	3.3	6,431	21.4	36,798	14,864	40.1	1,786	4.9
19	Trenton, N. J. ²	123,356	14,841	5,562	37.5	1,803	12.1	28,476	2,594	9.1	241	1.9
20	Erie, Pa. ²	115,967	21,618	5,881	27.2	2,512	11.6	29,080	3,256	11.2	277	1.0
21	Wichita, Kans. ³	111,110	22,245	1,847	7.3	5,946	23.2	31,536	8,673	27.5	2,719	8.6
22	Wilmington, Del. ³	106,597	10,590	5,208	47.4	1,458	13.3	27,402	2,154	7.9	139	1.3

23	Knoxville, Tenn. ³	105,802	22,828	2,828	12.4	5,536	24.3	25,851	10,176	39.4	2,095
24	Peoria, Ill. ³	104,969	21,828	6,693	30.7	4,070	18.6	26,101	3,237	12.4	684
25	Waterbury, Conn. ³	99,902	11,803	2,980	25.2	1,296	11.0	24,591	3,142	12.8	97
26	Sacramento, Calif. ³	93,750	19,919	2,498	12.0	3,152	15.8	28,021	7,732	10.0	739
27	Little Rock, Ark. ³	81,679	17,771	1,820	10.2	4,002	22.5	20,191	6,783	33.5	1,524
28	St. Joseph, Mo.	80,935	16,686	4,738	28.4	3,386	20.3	19,832	5,452	27.4	1,585
29	Lansing, Mich.	78,397	18,144	1,969	10.9	3,526	19.4	20,815	4,317	20.7	1,568
30	Binghamton, N. Y. ³	76,662	12,279	3,719	30.3	1,070	12.1	19,968	8,678	4.1	1,688
31	Shreveport, La.	76,655	19,722	4,262	2.2	2,391	8.7	21,872	3,161	13.6	1,781
32	Lincoln, Nebr.	75,933	18,773	2,475	13.2	2,851	15.2	23,542	1,852	9.4	1,299
33	Portland, Maine	70,810	10,475	4,592	43.8	1,256	11.0	19,689	1,852	18.8	1,793
34	Racine, Wis. ³	67,542	13,347	3,470	25.9	2,415	18.1	17,952	3,382	20.1	414
35	Topeka, Kans.	64,120	16,390	4,742	28.9	3,404	20.8	19,092	3,835	52.4	1,793
36	Charleston, S. C.	62,265	10,759	5,520	51.3	2,842	26.4	17,911	3,025	18.6	306
37	Wheeling, W. Va.	61,659	11,780	4,435	37.6	2,993	25.4	16,283	4,942	30.5	2,316
38	Springfield, Mo.	57,527	14,801	2,379	16.1	3,026	20.4	16,200	4,942	30.5	826
39	Decatur, Ill.	57,510	14,662	2,850	19.4	2,826	19.6	16,407	4,762	39.5	576
40	Greensboro, N. C.	53,569	11,000	4,12	3.7	2,158	19.6	12,061	3,323	23.1	1,416
41	Austin, Tex.	53,120	12,849	1,366	10.6	2,867	22.3	14,407	5,401	44.3	482
42	Columbia, S. C.	51,581	10,009	1,365	13.6	2,085	20.8	12,188	5,401	44.3	93
43	Kenosha, Wis. ³	50,262	11,196	1,196	12.6	1,256	13.2	12,273	1,803	14.7	882
44	Asheville, N. C.	50,193	10,833	1,053	9.7	2,885	26.6	12,584	5,111	40.6	2,542
45	Pueblo, Colo.	50,096	10,882	2,163	19.9	2,038	18.7	12,723	3,590	28.2	883
46	Jackson, Miss.	48,482	9,563	561	58.7	2,270	23.7	11,422	4,623	40.5	428
47	Phoenix, Ariz.	48,118	10,519	222	2.1	2,277	21.8	14,592	4,439	30.8	235
48	Williamsport, Pa.	43,729	8,459	3,974	46.9	1,742	20.6	12,141	1,989	16.4	1,421
49	Wichita Falls, Tex.	43,690	9,667	37	4.4	2,184	22.6	10,722	4,684	43.7	1,271
50	Butte, Mont.	39,532	7,358	1,509	20.5	2,102	28.6	10,727	3,258	30.5	988
51	Zanesville, Ohio	36,440	9,042	3,563	39.4	1,889	20.9	9,029	4,220	46.7	1,376
52	Paducah, Ky.	33,541	7,765	1,734	22.3	3,068	39.5	9,240	1,423	17.9	97
53	Sioux Falls, S. Dak.	33,362	7,561	910	12.0	1,152	15.2	7,969	1,789	22.0	144
54	Nashua, N. H.	31,463	5,646	2,312	49.8	504	10.0	8,149	2,381	31.0	421
55	Hagerstown, Md.	30,861	5,035	1,272	25.3	1,365	19.6	7,692	7,467	9.8	98
56	Baton Rouge, La.	30,729	6,951	282	4.1	803	15.4	7,467	7,299	18.1	743
57	Fargo, N. Dak.	28,619	5,209	498	6.0	1,124	17.4	7,820	1,418	12.0	69
58	Albuquerque, N. Mex.	26,570	6,438	388	9.6	409	9.6	6,618	1,000	15.4	469
59	Burlington, Vt.	24,789	4,252	2,019	47.5	937	18.1	6,477	1,676	10.9	295
60	Boise, Idaho	21,544	5,167	312	6.0	628	13.5	6,194	1,357	24.1	676
61	Reno, Nev.	18,529	4,652	330	7.1	1,091	25.8	5,619	1,847	22.1	78
62	Casper, Wyo.	16,619	4,227	17	4	257	9.8	3,785	600	22.1	441
63	Frederick, Md.	14,434	2,635	1,267	48.1	331	15.4	2,720			
64	Santa Fe, N. Mex.	11,176	2,145	521	24.3						

¹ Includes structures classed as needing major or structural repairs (class 3) and those unfit for habitation (class 4).

³ Similar data are available for the environs as well as for the metropolitan district (city proper and environs combined).

APPENDIX B—Continued

Housing conditions disclosed by real property inventory taken in 64 American cities, 1934—Continued

[Source: Taken from, or based on data collected and compiled by the Real Property Inventory, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce]

No.	City	Dwelling units—Continued											
		With 1, 2, or 3 rooms		Crowded or worse occupied units †		With no running water		With neither gas nor electric light		With no private in-door water closet		With neither bath-tub nor shower	
		Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
	Total, 64 cities	435,264	20.7	326,290	16.8	105,364	5.0	169,993	8.1	284,114	13.5	425,087	20.2
1	Cleveland, Ohio ³	27,043	11.6	33,736	15.9	675	.3	4,922	2.1	8,976	3.9	23,030	9.9
2	Minneapolis, Minn. ³	24,137	18.9	17,495	14.7	1,901	1.5	1,780	1.4	9,066	7.1	15,676	12.3
3	Seattle, Wash. ³	35,886	31.0	9,854	9.5	1,795	1.6	1,170	1.0	7,562	6.6	10,052	8.8
4	Indianapolis, Ind. ³	17,101	15.5	12,533	12.8	14,519	13.1	7,160	6.5	21,712	19.7	35,583	32.2
5	Portland, Oreg. ³	21,984	22.8	6,418	7.3	1,081	1.1	1,290	1.3	6,119	6.4	8,098	8.4
6	St. Paul, Minn. ³	9,885	13.8	9,417	13.9	1,519	2.1	1,458	2.0	5,146	7.2	8,925	12.5
7	Atlanta, Ga. ³	29,779	41.2	20,182	30.3	5,832	8.1	21,221	29.4	14,918	20.6	23,050	31.9
8	Dallas, Tex. ³	19,924	28.0	14,779	22.4	5,666	7.9	7,801	10.9	12,625	17.7	13,800	19.4
9	Birmingham, Ala. ³	29,641	42.4	17,310	27.2	5,141	7.3	21,310	30.5	17,285	24.7	30,631	43.8
10	Providence, R. I. ³	6,312	9.5	11,430	18.8	36	.1	1,538	2.3	2,055	3.1	13,579	20.3
11	Syracuse, N. Y. ³	5,193	9.2	4,710	9.0	89	.2	751	1.3	2,762	4.9	5,702	10.1
12	Worcester, Mass. ³	2,494	5.2	6,745	15.1	188	.4	285	.6	1,085	22.4	3,550	7.3
13	Oklahoma City, Okla. ³	12,359	27.9	10,079	23.7	5,415	12.2	3,766	8.5	11,064	25.0	9,745	22.0
14	Richmond, Va. ³	10,089	21.9	8,429	20.2	2,924	6.4	8,196	17.9	14,399	31.6	13,925	30.5
15	San Diego, Calif. ³	15,116	28.3	4,190	8.6	5,275	5.5	966	1.8	2,532	4.7	4,059	7.6
16	Des Moines, Iowa ³	8,119	19.5	5,986	15.2	5,512	13.3	1,992	4.8	9,896	23.8	12,237	29.4
17	Salt Lake City, Utah ³	9,829	26.4	8,409	24.3	740	2.0	1,482	1.3	3,244	8.7	4,067	10.9
18	Jacksonville, Fla. ³	7,298	19.8	6,758	20.3	2,619	7.1	11,463	31.1	7,230	19.6	11,476	31.2
19	Trenton, N. J. ³	1,555	5.5	3,907	14.6	51	.2	1,482	5.2	2,847	10.0	4,009	14.1
20	Erie, Pa. ³	1,251	4.3	3,451	13.2	297	1.0	402	1.4	747	2.6	4,226	14.5
21	Wichita, Kans. ³	7,292	23.1	4,295	14.7	3,589	11.4	1,395	4.4	5,779	18.3	6,566	20.8
22	Wilmington, Del. ³	2,637	9.6	3,182	12.2	205	.8	2,187	8.0	5,065	18.5	4,339	16.2
23	Knoxville, Tenn. ³	5,666	21.9	6,810	28.1	1,379	5.3	6,572	25.4	4,338	16.8	10,579	40.9
24	Peoria, Ill. ³	4,391	16.8	3,455	13.8	1,534	5.9	1,365	5.2	5,780	22.1	8,220	31.5

25	Waterbury, Conn. ¹	2,326	9.5	4,685	20.7	203	.8	405	1.6	783	3.2	2,434	10.0
26	Sacramento, Calif. ²	6,535	23.3	2,707	10.9	323	1.2	387	1.4	1,956	7.0	2,240	8.0
27	Little Rock, Ark. ³	4,973	20.6	3,488	18.9	3,213	15.9	4,339	21.5	4,788	23.5	5,538	27.4
28	St. Joseph, Mo.	4,013	24.1	3,109	16.9	1,630	8.2	1,537	7.7	4,693	23.5	6,216	31.2
29	Lansing, Mich.	1,842	8.9	1,796	9.0	723	3.5	329	1.6	1,232	5.9	3,036	14.6
30	Binghamton, N. Y. ³	1,425	7.1	2,018	10.7	75	.4	359	1.8	1,394	2.0	1,558	7.0
31	Shreveport, La.	8,549	39.1	4,842	24.0	2,675	12.2	6,068	27.8	6,728	30.7	9,434	43.1
32	Lincoln, Neb.	4,450	19.1	2,952	13.8	912	3.9	554	2.4	3,665	15.8	4,187	18.0
33	Portland, Maine	2,742	13.9	2,175	12.5	125	.6	224	1.3	2,428	12.3	3,415	17.0
34	Racine, Wis. ²	1,475	18.2	1,867	11.2	192	1.1	553	2.7	802	4.5	3,417	19.0
35	Topeka, Kans.	3,376	17.7	2,566	14.1	3,372	17.7	224	1.3	6,180	32.4	6,375	33.4
36	Charleston, S. C.	9,477	52.9	6,706	40.4	3,881	21.7	8,950	50.0	8,722	48.7	10,073	56.2
37	Wheeling, W. Va.	3,869	23.8	3,217	21.0	335	2.1	728	4.5	3,121	19.2	4,403	27.0
38	Springfield, Mo.	3,223	20.0	3,029	19.6	2,298	14.2	2,202	13.6	4,361	26.9	5,009	30.9
39	Decatur, Ill.	2,104	12.8	2,162	14.0	1,460	8.9	1,081	6.6	3,162	19.3	4,438	27.1
40	Greensboro, N. C.	1,924	16.0	3,120	25.9	1,269	10.5	2,080	17.0	2,233	18.5	3,411	44.9
41	Austin, Tex.	3,759	26.1	3,798	27.1	2,435	16.9	2,051	21.2	3,820	26.5	5,942	48.9
42	Columbia, S. C.	4,706	38.5	3,741	32.4	2,805	23.0	4,101	33.6	4,443	36.5	5,252	43.1
43	Kenoheha, Wis. ²	1,056	18.4	1,735	14.7	212	1.7	168	1.4	302	2.5	1,362	11.1
44	Asheville, N. C.	2,388	18.6	2,348	21.0	622	4.9	2,434	19.3	1,956	15.5	3,446	27.4
45	Pueblo, Colo.	3,165	24.9	2,181	18.7	1,050	8.3	1,033	8.1	3,817	30.0	4,080	32.1
46	Jackson, Miss.	4,372	38.3	3,048	27.2	1,449	12.7	4,074	35.7	4,375	38.3	5,198	45.5
47	Phoenix, Ariz.	5,669	39.4	2,509	18.8	936	6.5	1,137	7.9	2,157	15.0	2,540	17.4
48	Williamsport, Pa.	1,015	8.4	1,086	9.7	126	1.0	1,684	5.6	1,060	8.7	2,540	20.9
49	Wichita Falls, Tex.	2,760	25.7	2,117	21.5	933	8.7	1,735	16.2	1,495	14.0	1,968	18.4
50	Butte, Mont.	4,416	44.1	1,608	17.8	526	4.9	1,135	1.2	2,408	22.5	3,420	31.9
51	Zanesville, Ohio	1,197	11.2	1,323	13.5	961	9.0	958	9.0	3,480	32.6	3,965	37.1
52	Paducah, Ky.	3,525	39.0	2,419	28.4	2,677	29.6	2,710	30.0	4,531	12.8	4,372	50.2
53	Sioux Falls, S. Dak.	2,064	22.3	1,836	20.5	650	7.0	192	2.1	1,657	17.9	2,372	25.7
54	Nashua, N. H.	717	9.0	1,173	15.5	69	.9	259	3.2	224	2.8	2,054	25.8
55	Hagerstown, Md.	709	8.7	1,043	13.5	169	2.1	393	4.8	811	10.0	1,900	23.3
56	Baton Rouge, La.	2,535	33.0	1,737	24.1	486	6.3	2,142	27.9	1,239	16.1	2,227	28.9
57	Fargo, N. Dak.	2,216	29.7	1,623	23.2	361	4.8	1,129	1.7	1,032	13.8	1,408	18.8
58	Albuquerque, N. Mex.	2,752	35.2	1,929	26.7	878	11.2	927	11.9	2,041	26.1	2,291	29.2
59	Burlington, Vt.	651	9.8	1,021	16.3	24	.4	123	1.9	114	1.7	1,521	23.0
60	Boise, Idaho	1,913	29.5	1,048	17.0	499	7.7	210	3.2	1,364	21.1	1,559	24.1
61	Reno, Nev.	2,470	4.0	582	10.7	232	3.8	121	2.0	613	10.0	764	12.3
62	Casper, Wyo.	2,634	46.9	1,031	29.9	701	12.5	477	8.5	1,410	25.1	1,721	30.6
63	Frederick, Md.	370	9.8	469	12.7	125	3.3	437	11.5	1,762	46.6	1,517	40.1
64	Santa Fe, N. Mex.	1,301	47.8	882	35.4	770	28.3	679	25.0	1,190	43.8	1,201	44.2

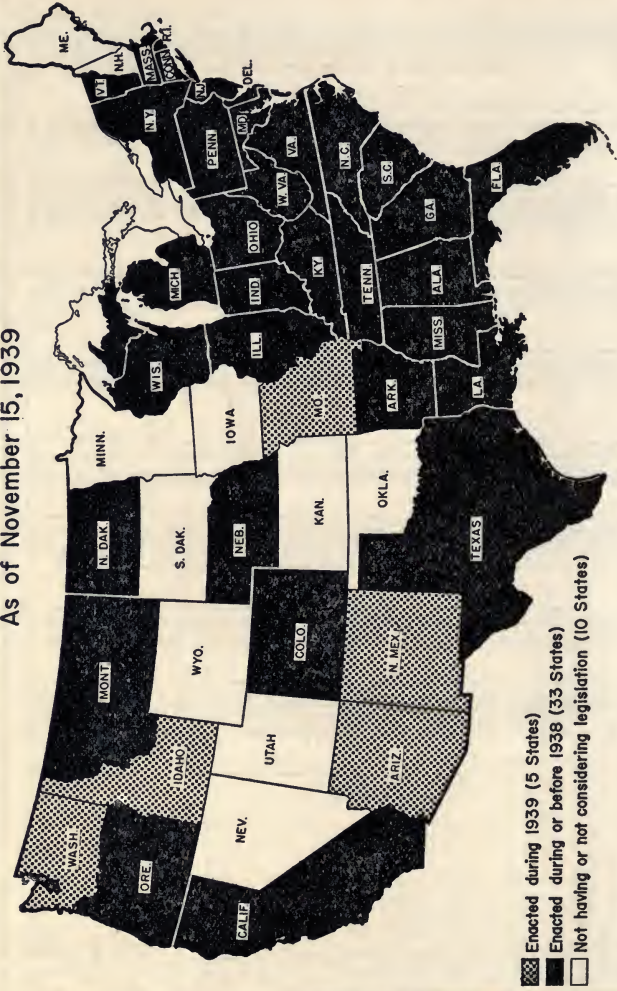
¹ Includes units classed as crowded (1.01 to 2 persons per room), overcrowded (2.01 to 3 persons per room), and greatly overcrowded (over 3 persons per room).
² Similar data are available for the environs as well as for the metropolitan district (city proper and environs combined).

Note.—Compiled in the research and information section of the Housing Division, Public Works Administration—February 1935.

APPENDIX C

STATUS OF PUBLIC HOUSING LEGISLATION, BY STATES

As of November 15, 1939



Research & Statistics Division
Research Section—Nov. 18, 1939

**Federal Works Agency
United States Housing Authority**

APPENDIX D

State court decisions concerning slum clearance and low-rent housing by local housing authorities

THERE is no case in which the highest court of any State has held invalid the State housing legislation. In the following list of cases, comprising all State housing decisions through November 1, 1939, the complete available citations are presented.

ALABAMA (advisory opinion to Governor): *In re Opinion of the Justices*, 235 Ala. 485, 179 So. 535 (March 17, 1938).

CALIFORNIA: *Housing Authority of the County of Los Angeles v. Isadore B. Dockweiler, Chairman*, 94 P. (2d) (October 11, 1939).

FLORIDA: (1) *Marvin v. Housing Authority of Jacksonville et al.*, 133 Fla. 590, 183 So. 145 (July 27, 1938); (2) *Lott and Lott v. City of Orlando, Florida et al.*, 190 So. (September 26, 1939).

GEORGIA: *Williamson v. Housing Authority of Augusta et al.*, 186 Ga. 673, 199 S. E. 43 (September 21, 1938).

ILLINOIS: *Paul A. Krause et al. v. Peoria Housing Authority et al.*, 370 Ill. 356, 19 N. E. (2d) 193 (January 26, 1939).

INDIANA: *Edwards et al. v. Housing Authority of the City of Muncie, Indiana, et al.*, 19 N. E. (2d) 741 (March 13, 1939).

KENTUCKY: *Spahn et al. v. Stewart et al.*, 268 Ky. 97, 103 S. W. (2d) 651 (February 19, 1937, extended March 26, 1937).

LOUISIANA: *State ex rel. Porterie, Atty. Gen. v. Housing Authority of New Orleans et al.*, 190 La. 710, 182 So. 725 (June 27, 1938, Rehearing denied, July 8, 1938).

MARYLAND (lower court): *Abraham Kreshtool v. Housing Authority of Baltimore City et al.* (Circuit Court No. 2, Baltimore City, October 18, 1939).

MONTANA: (1) *L. F. Rutherford et al. v. The City of Great Falls et al.*, 86 P. (2d) 656 (January 21, 1939); (2) *State ex rel. Helena Housing Authority v. City Council of Helena et al.*, 90 P. (2d) 514 (May 10, 1939).

NEW YORK: *New York City Housing Authority v. Muller et al.*, 270 N. Y. 33, 1 N. E. (2d) 153; See also, 155 Misc. 681, 279 N. Y. 599 (March 17, 1936).

NORTH CAROLINA: *Wells v. Housing Authority of Wilmington et al.*, 213 N. C. 744, 197 S. E. 693 (June 15, 1938).

OHIO: *State of Ohio ex rel. John D. Ellis, City Solicitor, City of Cincinnati v. C. O. Sherrill, City Manager, et al.* (Docket No. 27410, Court Journal 35, p. 441, January Term, Sup. Ct. of Ohio) Unreported case (June 21, 1939).

PENNSYLVANIA: *Dornan v. Philadelphia Housing Authority et al.*, 331 Pa. 209, 200 Atl. 834 (June 30, 1938).

SOUTH CAROLINA: *McNulty v. Owens et al.*, 188 S. C. 377, 199 S. E. 425 (October 13, 1938).

TENNESSEE: *Knoxville Housing Authority, Inc. v. City of Knoxville et al.*, 123 S. W. (2d) 1085 (January 21, 1939).

WEST VIRGINIA: *J. Paul Chapman v. The Huntington, West Virginia, Housing Authority et al.*, 3 S. E. (2d) 502 (June 13, 1939).

APPENDIX E

Housing projects built by the Housing Division of the Public Works Administration, now leased or operated by the United States Housing Authority¹

Location	Name	Site	Number of dwelling units
Alabama:			
Birmingham.....	Smithfield Court.....	Slum.....	540
Montgomery.....	Riverside Heights.....	Vacant.....	100
Do.....	Wm. B. Paterson Courts.....	Slum.....	156
Connecticut:			
Stamford.....	Fairfield Court.....	Vacant.....	146
Florida:			
Jacksonville.....	Durkeeville.....	do.....	215
Miami.....	Liberty Square.....	do.....	243
Georgia:			
Atlanta.....	Techwood Homes.....	Slum.....	604
Do.....	University Homes.....	do.....	675
Illinois:			
Chicago.....	Jane Addams Houses.....	Slum and vacant.....	1,027
Do.....	Julia C. Lathrop Homes.....	Vacant.....	925
Do.....	Trumbull Park Homes.....	do.....	462
Indiana:			
Evansville.....	Lincoln Gardens.....	Slum.....	191
Indianapolis.....	Lockefield Garden Apartments.....	do.....	748
Kentucky:			
Lexington.....	Blue Grass Park, Aspendale.....	Vacant.....	286
Louisville.....	La Salle Place.....	do.....	210
Do.....	College Court.....	do.....	125
Massachusetts:			
Boston.....	Old Harbor Village.....	do.....	1,016
Cambridge.....	Newtowne Court.....	Slum.....	294
Michigan:			
Detroit.....	Brewster.....	do.....	701
Do.....	Parkside.....	Vacant.....	775
Minnesota:			
Minneapolis.....	Sumner Field Homes.....	Slum.....	464
Nebraska:			
Omaha.....	Logan Fontenelle Homes.....	do.....	284
New Jersey:			
Atlantic City.....	Stanley S. Holmes Village.....	do.....	277
Camden.....	Westfield Acres.....	Vacant.....	514

¹ 2 Puerto Rico projects were transferred to the Puerto Rico Reconstruction Administration.

Housing projects built by the Housing Division of the Public Works Administration, now leased or operated by the United States Housing Authority—Con.

Location	Name	Site	Number of dwelling units
New York:			
Buffalo.....	Kenfield.....	do.....	658
Lackawanna.....	Baker Homes.....	do.....	271
New York.....	Williamsburg Houses.....	Slum.....	1, 622
Do.....	Harlem River Houses.....	Vacant.....	574
Schenectady.....	Schonowee Village.....	Slum.....	219
Ohio:			
Cincinnati.....	Laurel Homes.....	do.....	1, 039
Cleveland.....	Cedar Central Apartments.....	do.....	650
Do.....	Outhwaite Homes.....	do.....	579
Do.....	Lakeview Terrace.....	do.....	620
Toledo.....	Brand Whitlock Homes.....	do.....	264
Oklahoma:			
Enid.....	Cherokee Terrace.....	do.....	80
Oklahoma City.....	Will Rogers Courts.....	Vacant.....	354
Pennsylvania:			
Philadelphia.....	Hill Creek.....	do.....	258
Wayne.....	Highland Homes.....	Slum.....	50
South Carolina:			
Charleston.....	Meeting St. Manor, Cooper River Court.	Vacant.....	212
Columbia.....	University Terrace.....	Slum.....	122
Tennessee:			
Memphis.....	Dixie Homes.....	do.....	633
Do.....	Lauderdale Courts.....	do.....	449
Nashville.....	Cheatham Place.....	do.....	314
Do.....	Andrew Jackson Courts.....	do.....	398
Texas:			
Dallas.....	Cedar Springs Place.....	Vacant.....	181
Wisconsin:			
Milwaukee.....	Parklawn.....	do.....	518
District of Columbia:			
Washington.....	Langston.....	do.....	274
Virgin Islands:			
Christiansted, St. Croix Island.	Bassin Triangle.....	do.....	30
Frederiksted, St. Croix Island.	Marley Homes.....	do.....	38
St. Thomas, St. Thomas Island.	H. H. Berg Homes.....	Slum.....	58

APPENDIX F

United States Housing Authority-assisted projects, as of Nov. 30, 1939 ¹

State, city, and project number	Num-ber of units	State, city, and project number	Num-ber of units
Alabama:		Florida (con.)	
Anniston, ALA-4-1.....	166	Jacksonville:	
Birmingham:		FLA-1-1	230
ALA-1-1	860	FLA-1-1-A	368
ALA-1-2	48	FLA-1-2	708
ALA-1-3	614	Miami:	
ALA-1-3-A	292	FLA-5-1	345
ALA-1-4	432	FLA-5-2	352
Mobile:		FLA-5-3	378
ALA-2-1	100	Orlando, FLA-4-1	174
ALA-2-2	298	Pensacola:	
Phenix City:		FLA-6-1	120
ALA-5-1	216	FLA-6-2	120
ALA-5-2	206	St. Petersburg, FLA-2-1	242
Arizona:		Sarasota, FLA-8-1	60
Phoenix:		Tampa:	
ARIZ-1-1	225	FLA-3-1-R	534
ARIZ-1-2	150	FLA-3-2	320
ARIZ-1-3	135	FLA-3-3	328
California:		West Palm Beach:	
Los Angeles City, CALIF-4-1	610	FLA-9-1	246
Los Angeles County:		FLA-9-2	120
CALIF-2-1	607	Georgia:	
CALIF-2-2	300	Athens:	
CALIF-2-4	500	GA-3-1	54
Oakland:		GA-3-2	126
CALIF-3-1	400	Atlanta:	
CALIF-3-2	156	GA-6-1	630
San Francisco:		GA-6-2	606
CALIF-1-1	118	GA-6-3	634
CALIF-1-2	472	GA-6-4	598
CALIF-1-3	778	GA-6-5	1,207
CALIF-1-5	228	Augusta:	
CALIF-1-6	1,000	GA-1-1	167
Colorado:		GA-1-2	168
Denver:		GA-1-3	254
COLO-1-1	208	Brunswick:	
COLO-1-2	300	GA-9-1	128
COLO-1-3	210	GA-9-2	144
Connecticut:		Columbus:	
Bridgeport, CONN-1-1	1,250	GA-4-1-R	360
Hartford:		GA-4-2	288
CONN-3-1	146	GA-4-2-A	104
CONN-3-2	222	Macon:	
New Haven:		GA-7-1	188
CONN-4-1	500	GA-7-2	318
CONN-4-3	246	Rome:	
Norwalk, CONN-2-1	135	GA-5-1	148
Florida:		GA-5-2	94
Daytona Beach, FLA-7-1	167	Savannah:	
Fort Lauderdale, FLA-10-1	150	GA-2-1	176
		GA-2-2	501
		GA-2-3	330

¹ Italic type indicates those projects for which construction contracts have been signed; bold type indicates those being tenanted; all others are under loan contract.

United States Housing Authority-assisted projects, as of Nov. 30, 1939—Con.

State, city, and project number	Number of units	State, city, and project number	Number of units
Illinois:		Maryland (con.)	
Chicago:		Frederick:	
ILL-2-1.....	1,662	MD-3-1.....	79
ILL-2-2.....	1,345	MD-3-2.....	48
Granite City, ILL-5-1.....	151	Massachusetts:	
Peoria:		Boston:	
ILL-3-1.....	487	MASS-2-1.....	1,089
ILL-3-2.....	606	MASS-2-2.....	873
Springfield, ILL-4-1.....	600	MASS-2-3.....	1,023
Indiana:		MASS-2-4.....	306
Delaware County, IND-4-1.....	112	MASS-2-5.....	159
Gary:		MASS-2-6.....	540
IND-11-1.....	305	MASS-2-7.....	426
IND-11-2.....	317	MASS-2-8.....	522
IND-11-3.....	177	MASS-2-9.....	603
Hammond:		Cambridge, MASS-3-1.....	328
IND-10-1.....	200	Fall River:	
IND-10-2.....	200	MASS-6-1.....	354
Kokomo, IND-7-1.....	176	MASS-6-2.....	222
Muncie, IND-5-1.....	278	Holyoke, MASS-5-1.....	159
New Albany, IND-12-1.....	124	Lowell, MASS-1-1.....	536
Vincennes, IND-2-1.....	83	New Bedford:	
Kentucky:		MASS-7-1.....	200
Covington:		MASS-7-2.....	198
KY-2-1.....	235	Michigan:	
KY-2-2.....	163	Detroit:	
Frankfort, KY-3-1.....	91	MICH-1-1.....	240
Lexington:		MICH-1-2.....	355
KY-4-1.....	86	MICH-1-4.....	2,150
KY-4-2.....	206	MICH-1-5.....	440
Louisville:		Mississippi:	
KY-1-1.....	786	Biloxi:	
KY-1-2.....	808	MISS-5-1.....	100
Paducah:		MISS-5-2.....	100
KY-6-1.....	125	MISS-5-3.....	100
KY-6-2.....	75	Hattiesburg:	
Louisiana:		MISS-1-1.....	120
New Orleans:		MISS-1-2.....	120
LA-1-1.....	970	Laurel:	
LA-1-2.....	723	MISS-2-1.....	150
LA-1-3.....	916	MISS-2-2.....	125
LA-1-5.....	903	McComb:	
LA-1-7.....	690	MISS-3-1.....	76
LA-1-8.....	746	MISS-3-2.....	90
Maryland:		Meridian:	
Annapolis, MD-1-1.....	108	MISS-4-1.....	89
Baltimore:		MISS-4-2.....	119
MD-2-1.....	692	MISS-4-3.....	81
MD-2-2.....	878	MISS-4-4.....	89
MD-2-3.....	810	Missouri:	
MD-2-4.....	298	St. Louis:	
MD-2-5.....	404	MO-1-1.....	700
MD-2-6.....	600	MO-1-2.....	680
MD-2-7.....	502		

United States Housing Authority-assisted projects, as of Nov. 30, 1939—Con.

State, city, and project number	Number of units	State, city, and project number	Number of units
Montana:		North Carolina (con.)	
Billings, MONT-1-1.....	104	Raleigh:	
Butte, MONT-3-1.....	225	N. C.-2-1.....	200
Great Falls, MONT-2-1.....	157	N. C.-2-2.....	231
Helena, MONT-4-1.....	71	Wilmington:	
Nebraska:		N. C.-1-1-R.....	216
Omaha:		N. C.-1-2.....	246
NEBR-1-1.....	522	Ohio:	
NEBR-1-2.....	283	Akron, OHIO-7-1.....	276
New Jersey:		Cincinnati:	
Asbury Park, N. J.-7-1.....	126	OHIO-4-1.....	750
Atlantic City, N. J.-14-1.....	375	OHIO-4-2.....	750
Beverly, N. J.-18-1.....	71	OHIO-4-3.....	264
Camden, N. J.-10-1.....	275	Cleveland:	
Elizabeth:		OHIO-3-1.....	582
N. J.-3-1.....	423	OHIO-3-2.....	627
N. J.-3-2.....	405	OHIO-3-3.....	491
Harrison, N. J.-16-1.....	222	OHIO-3-4.....	568
Jersey City:		OHIO-3-5.....	224
N. J.-9-1.....	498	Columbus:	
N. J.-9-2.....	450	OHIO-1-1.....	426
Long Branch, N. J.-8-1.....	127	OHIO-1-2.....	340
Newark:		OHIO-1-3.....	255
N. J.-2-1.....	530	OHIO-1-4.....	350
N. J.-2-2.....	236	Dayton:	
N. J.-2-5.....	463	OHIO-5-1-R.....	604
N. J.-2-6.....	354	OHIO-5-2.....	200
N. J.-2-7.....	434	Portsmouth, OHIO-10-1.....	268
N. J.-2-8.....	300	Toledo:	
North Bergen, N. J.-4-1.....	172	OHIO-6-1.....	384
Perth Amboy, N. J.-6-1.....	258	OHIO-6-2.....	112
Summit:		OHIO-6-3.....	302
N. J.-17-1.....	50	Warren, OHIO-8-1.....	226
N. J.-17-2.....	50	Youngstown:	
Trenton:		OHIO-2-1.....	618
N. J.-5-1.....	118	OHIO-2-2.....	410
N. J.-5-2.....	376	Zanesville, OHIO-9-1.....	326
New York:		Pennsylvania:	
Buffalo:		Allegheny County, PA-6-2.....	310
N. Y.-2-1.....	668	Allentown, PA-4-1.....	322
N. Y.-2-2.....	173	Bethlehem, PA-11-1.....	250
N. Y.-2-3.....	772	Chester, PA-7-1.....	396
New York:		Harrisburg:	
N. Y.-5-1.....	2,583	PA-8-1.....	200
N. Y.-5-2.....	3,161	PA-8-2.....	200
N. Y.-5-3.....	1,531	McKeesport, PA-5-1.....	206
N. Y.-5-4.....	448	Philadelphia:	
N. Y.-5-5.....	1,326	PA-2-1.....	535
Syracuse, N. Y.-1-1.....	678	PA-2-2.....	1,000
Utica, N. Y.-6-1.....	213	PA-2-3.....	1,361
Yonkers, N. Y.-3-1.....	552	PA-2-4.....	950
North Carolina:		PA-2-5.....	1,001
Charlotte:		Pittsburgh:	
N. C.-3-1.....	256	PA-1-1.....	804
N. C.-3-1-A.....	108	PA-1-2.....	420
N. C.-3-2.....	452	PA-1-3.....	1,758
		Reading, PA-9-1.....	400

United States Housing Authority-assisted projects, as of Nov. 30, 1939—Con.

State, city, and project number	Number of units	State, city, and project number	Number of units
South Carolina:		Texas (con.)	
Charleston:		Houston (con.)	
S. C.-1-1.....	140	TEX-5-4.....	672
S. C.-1-3.....	162	TEX-5-5.....	442
S. C.-1-4.....	128	TEX-5-6.....	260
S. C.-1-5.....	172	Laredo, TEX-11-1.....	272
S. C.-1-6.....	126	San Antonio:	
Columbia:		TEX-6-1.....	932
S. C.-2-1.....	236	TEX-6-3.....	800
S. C.-2-2.....	200	TEX-6-4.....	232
Tennessee:		TEX-6-5.....	342
Chattanooga:		Waco:	
TENN-4-1.....	497	TEX-10-1.....	103
TENN-4-2.....	437	TEX-10-2.....	140
Kingsport:		Virginia:	
TENN-6-1.....	128	Bristol:	
TENN-6-2.....	48	VA-2-1.....	142
Knoxville:		VA-2-2.....	56
TENN-3-1.....	244	Washington:	
TENN-3-2.....	320	Seattle, WASH-1-1.....	700
TENN-3-3.....	200	West Virginia:	
Memphis:		Charleston:	
TENN-1-1.....	478	W. VA-1-1.....	304
TENN-1-2.....	900	W. VA-1-2.....	170
Nashville:		Huntington:	
TENN-5-1.....	350	W. VA-4-1.....	80
TENN-5-2.....	332	W. VA-4-2.....	136
Texas:		W. VA-4-3.....	284
Austin:		Martinsburg, W. VA.-6-1.....	100
TEX-1-1.....	86	Mount Hope, W. VA.-7-1.....	70
TEX-1-1-A.....	81	Wheeling, W. VA.-3-1.....	200
TEX-1-2.....	60	District of Columbia:	
TEX-1-2-A.....	70	Washington:	
TEX-1-3.....	40	DC-1-1.....	326
Brownsville, TEX-7-1.....	150	DC-1-2.....	246
Corpus Christi:		DC-1-3.....	428
TEX-8-1-R.....	134	DC-1-4.....	301
TEX-8-2-R.....	198	DC-1-6.....	316
TEX-8-3-R.....	108	DC-1-7.....	287
Dallas:		DC-1-8.....	309
TEX-9-1.....	626	Territory of Hawaii:	
TEX-9-2.....	628	Honolulu:	
El Paso:		TH-1-1.....	221
TEX-3-1.....	314	TH-1-3.....	390
TEX-3-2.....	314	Puerto Rico:	
Ft. Worth:		Fajardo, PR-3-1.....	210
TEX-4-1.....	252	Mayaguez, PR-4-1.....	476
TEX-4-2.....	250	Ponce:	
Houston:		PR-1-1.....	300
TEX-5-1.....	360	PR-1-2.....	280
TEX-5-1-A.....	204	PR-1-3.....	116
TEX-5-2.....	328	PR-1-4.....	120
TEX-5-3.....	288	PR-1-5.....	340
		San Juan, PR-2-1.....	420

APPENDIX G

Foreign housing experience

1. *Public measures relating to housing.*—Certain public measures having an influence on housing exhibit no essential differences of principle or method among civilized nations and therefore need not detain us. These include: (1) Public health works such as water, sewers, streets, collection and disposal of waste. (2) Utilities such as gas, electricity, telephones, transportation. (Considerable divergence exists here among the different countries as between public and private ownership and operation.) (3) Restrictive regulations in building and sanitary codes. (4) Zoning and city planning, as they affect future developments.

The following measures, however, although extensively used elsewhere, are not yet found in the United States or have only recently been introduced.

(a) Public ownership of land in and around cities. Wisely used, this may prevent the inflation of land values. In practice it has by no means always been wisely used. Although at present talked about, extensive public ownership of urban land is not yet found in the United States.

(b) Public loans which are repaid in full with interest, which reduce rents or purchase cost by low interest rate and long amortization period.

(c) Subsidy or grant, at the expense of the taxpayers, to bring rents within the reach of the lowest income groups. These last two measures exist in the United States under the Wagner-Steagall United States Housing Act of 1937 and accompanying State legislation.

Loans and grants may be made to: (1) Public or quasi public local authorities. (This is the only form found in the United States.) (2) Public utility housing societies, either cooperative or limited dividend. (3) Individuals of low income acquiring homes. (4) Private business enterprise. Subsidy to this last group, rather extensively used immediately after the World War to stimulate private building, has been generally abandoned as expensive and unnecessary.

England (and Wales) will be cited as the outstanding example, both for quantity and quality, of the first type of subsidy, and Holland of the second.

2. *Housing by local authorities in Great Britain.*—The underlying accepted principle was well stated in the Report of the National Housing Committee in 1934: "The provision of housing accommodation, not below a minimum standard, for every family in the United Kingdom, at a rent within the family capacity to pay . . . as a public responsibility and a national service."

This principle was really implicit in the Shaftesbury Act of 1851, which provided that where there was a shortage of suitable working-class housing at suitable rents, the local authorities might provide it. During several decades, local experiments, not too successful, were made in slum clearance and rehousing. After 1890, legislation and practice improved. Between then and 1914, between 100 and 200 local authorities built some tens

Number of dwellings constructed in England and Wales, by local authorities and by private enterprise, with and without public assistance, 1919-38¹

Year ²	Total	Local authorities with public assistance	Private enterprise	
			With public assistance	Without public assistance
1919-20-----		576	139	
1920-21-----	³ 251, 988	15, 585	12, 964	³ 53, 800
1921-22-----		80, 783	20, 288	
1922-23-----		57, 535	10, 318	
1923-24-----	86, 210	14, 353	4, 311	67, 546
1924-25-----	136, 889	20, 624	47, 045	69, 220
1925-26-----	173, 426	44, 218	62, 769	66, 439
1926-27-----	217, 629	74, 093	79, 686	63, 850
1927-28-----	238, 914	104, 034	74, 548	60, 332
1928-29-----	169, 532	55, 723	49, 069	64, 740
1929-30-----	202, 060	61, 850	50, 124	90, 086
1930-31-----	183, 807	55, 874	2, 565	125, 368
1931-32-----	200, 812	70, 061	2, 333	128, 418
1932-33-----	200, 496	55, 991	2, 493	142, 012
1933-34-----	266, 622	55, 840	2, 913	207, 869
1934-35-----	329, 106	41, 593	1, 139	286, 374
1935-36-----	324, 860	52, 357	222	272, 281
1936-37-----	346, 053	71, 740	797	273, 516
1937-38-----	337, 610	77, 976	2, 553	257, 081
Total, 1919-38----	3, 666, 014	1, 010, 806	426, 276	2, 228, 932

¹ Sources: Figures from 1919 to 1929, inclusive, from *Housing Policy in Europe, 1930*, International Labor Office; from 1930 to 1937, inclusive, *Housing, House Production, Slum Clearance, etc., England and Wales, Position at 31st of March, 1938*, British Ministry of Health.

² The fiscal year runs from Apr. 1 to Mar. 31.

³ 1919-20 to 1922-23, inclusive.

of thousands of working-class cottages, renting them at enough to make them self-sustaining, except where slum clearance was involved. In the latter case, the unavoidable excess cost was charged to the rates (local taxes) as a public health expenditure. The reason that more of it was not done was due to the entirely human objections of the ratepayers.

These decades of small-scale experiments built up technical experts and an enlightened public opinion which alone made the post-war achievements possible.

In 1919 there were some 8,000,000 family dwellings in England and Wales. During the next 20 years, approximately 4,000,000 more were built. That is, the supply was increased one-half. Nearly one and a quarter million, or about 30 percent, have been built and are now owned and managed by local authorities, urban, rural, and occasionally county. During the 1920 decade, and until nearly a million small houses had been built for ordinary workers to relieve the acute shortage, little was done in slum clearance and the rehousing of the lowest income groups. Since 1930, however, that difficult task has occupied the center of the stage. Only for rehousing in connection with slum clearance, for the abatement of overcrowding, and for agricultural laborers (whose wages are very low) is the national subsidy now available. More than 1,000 local authorities are, however, working under these provisions.

The amount paid out in subsidies in 1937-38 was £14,617,543 (about \$73,000,000) and the total amount paid since 1919 has been £193,438,059—something under a billion dollars. These are annual subsidies, of course, not capital cost. In the spring of 1938 capital cost amounted to just under 2½ billion dollars for subsidized post-war housing by local authorities.

3. *Housing societies in Holland.*—In Holland, as well as in England, there is municipal housing, including slum clearance and the rehousing of those displaced. It is well done and presents many points of interest. But relatively, as well as absolutely, it is less important than in Great Britain. The most characteristic Dutch developments are her nearly 1,000 cooperative housing societies composed of better-paid workingmen and lower-paid white-collar workers and officials. For a few years after the World War these societies received subsidies, but as soon as economic conditions were stabilized, subsidies came to an end. They may receive a loan for the whole capital

cost, at Government bond interest rate and with 50 years for amortization. But when the 50 years is over, the property will belong, not to the society, but to the city housing department, which has exercised close supervision throughout. Proportions vary in different cities. In Amsterdam, there are roughly 12,000 municipal dwelling units, and 24,000 built and managed by societies—the two together forming about 20 percent of all dwellings. Something over 220,000 family units have been built in Holland since the war with some form of Government aid, either by municipalities or societies.

Dutch housing dates from the National Act of 1901. As in Great Britain and other countries, what was done before the World War was experimental and on a comparatively small scale.

Cooperative housing societies have played an important role also in the Scandinavian countries, especially in Sweden. But since there cooperative ownership is involved and the payment of an equity, the system does not reach as low an income group as in Holland.

4. *Aids to home ownership for families of borderline income.*¹

(a) In Belgium, Act of 1889:

Number of small homes acquired under it to December 31, 1938.....	243,800
Number of foreclosures during that time.....	2,712
<i>Total amount of loans made, 3,267,944,702 francs.</i>	

(b) New Zealand Advances to Workers Act of 1906:

Number of small homes acquired under it to Mar. 31, 1929....	32,949
Amount of loss through bad debts.....	£8,265
<i>Total amount of loans made, £17,530,085.</i>	

Compare these figures with the foreclosures shown in chart XII *Nonfarm Residential Foreclosures and Refinanced Mortgages in the United States 1926-38.*

¹ The only similar effort in the United States is that of California, under the Veterans' Farm and Home Purchase Act, 1921. Number of small homes purchased to June 30, 1939, 17,867. Number of farms purchased to June 30, 1939, 589. Total investment by Veterans' Welfare Board, \$86,615,146. Of this sum, \$80,000,000 was provided by issues of State bonds and the balance by administrative savings and earnings. To June 30, 1934, 715 homes and 53 farms had been repossessed and resold, the homes constituting 6¼ percent of the total at that date. At the same time 29½ percent of accounts were in arrears. Since that period the situation has been stabilized by permitting many veterans to cancel their old contracts and enter into new ones, adding depression arrears to debt principal and prolonging repayment period. Other homes have, however, been resold, to a number not at present ascertainable. Total loss incurred in resale of homes, 1921 to 1939, was \$850,349, and of farms \$208,902. Obviously the California record is not so good as that of Belgium or New Zealand, but it shines brilliantly in comparison with foreclosures in private enterprise housing in the United States as shown in chart XII.



